Economics and Diversity

Carlo D'Ippoliti



Routledge Frontiers of Political Economy

Economics and Diversity

The bulk of contemporary economics assumes rather than explains differences between people or groups of people. Yet, many of these differences are produced by society or they imply differing opportunities and outcomes. This book argues that economists should concern themselves with the explanation of the social causes and effects of such differences.

D'Ippoliti introduces the concept of *diversity* to summarize all differences that are of social origin and that a theory or model seeks to explain. This contrasts with the traditional concept of heterogeneity that instead refers to differences that are deemed to be exogenous of economic theory. In approaching this, the book ranges from the fields of methodology and history of economics to applied empirical work, as well as gender diversity, which is considered in depth. An analysis of the thinking of two major economists of the past, John Stuart Mill and Gustav Schmoller, demonstrates how gender diversity exemplifies some of the fundamental issues in economics, such as the division of labor, society's capacity to reproduce itself, and the role of social institutions and their impact on individual and collective behavior.

In its policy implications, the book maintains that growth of GDP and of the services sector cannot be trusted to bring about automatically greater inclusion of women in the labor market. Active policy interventions are needed, spanning from the removal of discrimination to the provision of public services and the establishment of fair competition in the market, along with an improved division of social and political power between the sexes. This work will be of interest to researchers and students focusing on the history of economic thought, labor economics, social policy and gender studies.

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Routledge
Taylor & Francis Group
LONDON AND NEW YORK

First published 2011
by Routledge
2 Park Square, Milton Park, Abingdon, Oxon OX14 4RN

Simultaneously published in the USA and Canada
by Routledge
711 Third Avenue, New York, NY 10017

This edition published in the Taylor & Francis e-Library, 2011.

To purchase your own copy of this or any of Taylor & Francis or Routledge's collection of thousands of eBooks please go to www.eBookstore.tandf.co.uk.

Routledge is an imprint of the Taylor & Francis Group, an informa business

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British Library Cataloguing in Publication Data
A catalogue record for this book is available from the British Library

Library of Congress Cataloging in Publication Data
D'Ippoliti, Carlo.
Economics and diversity / by Carlo D'Ippoliti.
p. cm.
Includes bibliographical references and index.
1. Economics–Sociological aspects. 2. Cultural pluralism. 3. Economics–History. 4. Economics–Methodology. I. Title.
HM548.D57 2010
306.3–dc22

2010047977

ISBN 0-203-81597-1 Master e-book ISBN

ISBN: 978-0-415-60027-9 (hbk)
ISBN: 978-0-203-81597-7 (ebk)

for Jordan and Vale,
who (perhaps too often) remind me we are different;
for Marcella and Angie,
who (not always voluntarily) remind me we're all the same.

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MARCELLA CORSI

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Preface

Marcella Corsi

> Many persons think they have sufficiently justified the restrictions on women's field of action, when they have said that the pursuits from which women are excluded are *unfeminine*, and that the *proper sphere* of women is not politics or publicity, but private and domestic life.
>
> We deny the right of any portion of the species to decide for another portion, or any individual for another individual, what is and what is not their "proper sphere". The proper sphere for all human beings is the largest and highest which they are able to attain to. What this is, it cannot be ascertained, without complete liberty of choice.
>
> (Harriet Taylor Mill, 1851, p. 100)

Diversity and Economics is a path-breaking and richly provocative work. I shall briefly discuss here the conditions under which it was written, the contribution it makes to economics and the directions it suggests for future research.

The context of the book's writing

The book began as a thesis, in the context of a double doctorate in Economics involving Sapienza University of Rome in Italy and the Johann Wolfgang Goethe University of Frankfurt am Main in Germany, concluded in 2009. The thesis was co-supervised by Bertram Schefold, who provided guidance to Carlo D'Ippoliti in the history of economic thought – and who suggested in particular that he consider the works by Gustav von Schmoller and by me – which helped to guide him in the direction of gender issues.

D'Ippoliti has been extremely brave in choosing a topic of analysis at the crossroads of economic theory, history of economic thought and applied economics, at a time in which young scholars tend to specialize more and more in mainstream (often mathematical) economics. In doing so he has shown an extraordinary capacity to thread together elements from various schools of thought and use them to deal with a complex topic of analysis: he has taken the various approaches as tools to be used creatively, combining them with his own ideas and testing them empirically. His research program takes to heart Alois J. Schumpeter's dictum that good economics must encompass history, economic theory and statistics, and therefore

does not generally take the form of elegant formal models that are applicable to all and everything. Theoretical models, econometric and statistical analyses are crystallizations which enable us to order and compare alternative developments and keep us in touch with reality; but they should not be allowed to take on a life of their own or to dominate discourse, which has to make allowance for institutional factors and dynamic developments.

The book's contribution to economics

The economic profession, as is known, is friendly neither to women nor to the analysis of gender issues. "Most economists" wrote Barbara Bergmann (1987, p. 132) could be characterized as "hostile to any suggestion that the economic position of women needs improvement". Moreover, as stressed by Michèle Pujol, "[…] women are not the object of a complete neglect, rather they are construed, explicitly or implicitly, as exceptions to the rules developed, as belonging 'elsewhere' than in the economic sphere" (1992, p. 1).

It is particularly remarkable that a young man – Carlo D'Ippoliti is now 29 years old – has decided to dedicate his analysis to *gender*, as a specific example of diversity, although the feminist challenges which have swept the academy in the past twenty years have barely troubled the economic discipline.

In line with Pujol's pioneering work, D'Ippoliti highlights, through a direct exegesis of John Stuart Mill's and Gustav von Schmoller's most relevant works, those insights that could only be gained through a gender analysis of the economy, and those patterns of inequality that would have remained hidden to a-gendered investigations.

Both Mill and Schmoller studied gender relations as a part of political economy, not mainly because the study of household management is one of the historical roots of the discipline, but because the gender divide suggests pertinent patterns of economic inequality and constitutes a fundamental part of the process of social production and reproduction.

The analysis of Mill's and Schmoller's thinking allows D'Ippoliti to highlight concrete examples of two major themes: that social environment and institutions fundamentally shape the context and purpose of individuals' behavior; and that behavior itself frequently takes the form of collective behavior, for example when considering the family as a place of joint consumption. As a consequence, *gender* emerges as a relevant form of social embeddings (in a general sense of interdependence of economic behavior and social institutions), and therefore as a convenient aspect of diversity. Accordingly, men's and women's behavior may be considered as strongly dependent upon their social roles: in terms of economic and political power, cultural stereotypes, legal and social constraints.

Besides the interest per se of highlighting patterns and causes of differences and inequality, the analysis of gender diversity is also useful to point out aspects of economic history that would otherwise be excluded from analysis, and it paves the way for the consideration of an array of individual motives and causes of action, while possibly including instances of collective action.

Looking ahead

As D'Ippoliti is well aware, this book, while covering a great deal of ground, does not say all that needs to be said about gender and diversity. Indeed, D'Ippoliti shows that gender is a useful example to highlight the advantages of the deployment of the concept of diversity within economic analysis, for a number of reasons:

- It is particularly suited to highlight the multidimensionality of classifications and the difference between the concepts of diversity and heterogeneity.
- It allows us to avoid the issue of what kind of classification it is (whether established or ad hoc, created by the researcher), since gender was considered by Schmoller and Mill – and all the literature of their time – as a self-evident and existing subdivision of society.
- The "Women's Question" (*Frauenfrage*) was a relevant political issue during the second half of the nineteenth century, and from many points of view gender mainstreaming and the achievement of equal opportunities for men and women still constitute a major political goal.

However, much work must still be done in order to understand fully the implications of gender and diversity in economics. As stressed in the Conclusions of this book, non-marginalist approaches to economics – such as the Post-Keynesian, the Sraffian, the Institutionalist, the Radical and Marxian – use aggregative analysis as a relevant (if not principal) method of analysis. Issues that emerged as crucially affected by gender relations through the analysis of Schmoller's and Mill's thought – such as the division of labor, societal capacity to reproduce itself, social institutions and their impact on individual and collective behavior, and so on – are central concerns to these schools of political economy. Yet, as highlighted for example, by Todorova (2009), their interest in gender as a relevant analytical classification is scant or virtually non-existent (an exception being the feminist offshoots of these schools of thought). Discovering the main reasons for such an apparent paradox may be an interesting task for further research.

Marcella Corsi

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Acknowledgments

This work would not have been possible without the intellectual and emotional support of those who care about me. At risk of being a bit naive, I wish to thank them all. In primis, of course, my family.

Besides the obvious and fundamental contribution of my Ph.D. supervisors, Marcella Corsi and Bertram Schefold, I am particularly indebted to two people for the great input they gave to this work. The applied analysis in Part IV of the book is partly based on the elaboration of precious material produced with the collaboration of Angela Cipollone. The historical analysis of Parts II and III benefited from in-depth criticisms from, and fruitful discussions with, Alessandro Roncaglia. Angela and Alessandro deserve a special place here and in my affection. Salvatore Biasco and Roberto Villetti provided a crucial incentive towards the conclusion of this research and more than others their criticisms have been welcome. A number of friends and colleagues helped my research by discussing parts or chapters of this work during my Ph.D. thesis or at a conference: Michele Battisti, Fabrizio Botti, Anna Conte, Annie Cot, Daniela Di Cagno, Maghnad Desai, Evelyn Forget, Massimo Franchi, Geoff Harcourt, John Hey, Jan Kregel, Edith Kuiper, Federico Lucidi, Maria Cristina Marcuzzo, Craig McLaren, Annalisa Rosselli, Susanne Rühle, Christian Schmidt, Paolo Trabucchi, Robert Urquhart, Luigi Ventura, Roberto Zelli. I wish to thank the participants of the EES – Evaluation Strategy Workshop (Rome, 2006), the 2007 Storep Summer School, the 2008 IAFFE Annual Conference, the 2008 and 2010 Storep Annual Conferences, and the 2010 HES Conference. Financial support from the HES and Storep in the form of their respective 2010 Young Scholar Awards is kindly acknowledged.

Iori Wallace and Jordan Clark Wood provided helpful assistance and a number of relevant insights. Indeed, they masterly proofread earlier versions of the manuscript, but since I was the last person to work on it they cannot be held responsible for any remaining errors and mistakes.

To all these people go my *grazie, danke* und thank you.

Carlo D'Ippoliti

Earlier versions of parts of Chapters 10, 12 and 13 were published in the following outlets:

Cipollone, A. and D'Ippoliti, C. (2010), "Discriminating Factors of Women's Employment", *Applied Economics Letters*, vol. 17, n. 11, pp. 1055–1062.

Cipollone, A. and D'Ippoliti, C. (2011), "Women's Employment: Beyond Individual Characteristics vs. Contextual Factors Explanations", *American Journal of Economics and Sociology*, forthcoming.

D'Ippoliti, C. (2010), "Saggio di recensione di Apps and Rees (2009) e Todorova (2009)", *Moneta e Credito*, vol. 63, n. 250. Available online at the URL: http://sead-pub.cilea.it/index.php/MonetaeCredito/article/view/247/125.

Introduction

> *…but already a person in whom the social feeling is at all developed, cannot bring himself to think of the rest of his fellow creatures as struggling rivals with him for the means of happiness.*
>
> (Mill, 1861b, p. 233)

The topic to be dealt with in this book is at the core of economics. Indeed, ever since it was still practiced as a branch of moral philosophy, political economy has been concerned with the explanation of inequality and socioeconomic differences among people and between populations. Yet, the main claim of the present work is that the bulk of contemporary economic theory has somewhat lost of sight this aim, and today economics assumes rather than attempts to explain interpersonal differences.

To argue this point, I propose a conceptual framework to think about differences between individuals, distinguishing the fairly diffused idea of *heterogeneity* from a different concept that I term *diversity*. While a more precise definition of the two concepts will be provided in the first chapter, we may preliminarily refer the former idea to differences that, from the point of view of economic analysis, are exogenous to the theory being developed or utilized. In contrast, by "diversity" I mean forms of difference of which the causes and consequences are studied in economic analysis and therefore are endogenous to a theory or model. Since economics deals with society, it follows that diversity encompasses differences of social origin, whereas heterogeneity refers to differences that the economist believes not to be of socioeconomic origin or that they deem uninteresting.

The introduction and development of the concept of diversity throughout the book will require a detour across disparate subfields of economics, such as methodology, the history of economic thought, gender analysis, econometrics and applied economics; as well as the blurring of many disciplinary boundaries. Indeed, I suggest in Part I that the two processes are historically related: the abandonment of the idea of diversity and the process of disciplinary specialization and separation within the social sciences.[1]

My interest in the topic of interpersonal differences doubtlessly arises from a certain aversion to extreme inequality, or, better, to unjustifiable inequality.

While I hope that this bias has not affected the quality of the work, it must be recognized that the topic of interpersonal differences is exceptionally prone to an overlap between descriptive, analytical and normative concepts of equality. By *descriptive* concepts of equality I mean the consideration of substantial equality; that is, observable parity of outcomes and/or of opportunities (as measured by some relevant variables) in the real world. By *analytical* equality, using the term in a slightly more general sense than Peart and Levy (2005), I mean the theoretical assumption of uniformity between two persons or two groups of people, again with respect to some measurable characteristic (which may or may not imply inequality along some other dimension). Finally, by *normative* equality I mean the traditional Benthamite position in developing ethical and/or political statements ("everyone to count for one, nobody for more than one").

Among these perspectives, the present work is chiefly meant to deal with the concept of analytical inequality, and it primarily addresses economists. However, a number of political or normative implications emerges that directly or indirectly follow from the theoretical analysis. Indeed, one of the arguments for the adoption of the concept of diversity within economic theory is that it is shown to be suitable for profitable application within empirical analyses, and that it leads to sensible and relevant policy implications that would otherwise be less easily the object of scientific treatment.

The argument in the present work is based on the in-depth analysis of a limited number of issues, rather than on an encyclopedic overview. Specifically, it will deal with the historical analysis of the major works of John Stuart Mill and Gustav von Schmoller, the analysis of gender differences and an investigation of labor market trends in terms of gender differentials.

Such an assortment of topics may at first look naive to the Anglo-American reader. Indeed, as mentioned in the Preface, this work was developed within a Continental European tradition, in which the history of economic thought traditionally plays a significantly larger role than in the UK or the USA. However, what is most characteristic of the book's approach to history is that it is assumed that by analyzing relevant works of the past it is possible to glean relevant insights useful to contemporary economic analysis. There are at least two reasons why contemporary readers may concern themselves with the history of economic thought. On one hand, authors from the period considered here (late nineteenth century) observed society and the economy from a markedly different viewpoint than that of mainstream contemporary economics.[2] In so far as the ascent of the marginalist approach to economics constituted a core revolution within the political economy (as discussed in Chapter 1) – that is, a shift that modified the way economists select the relevant research questions and the way they try to answer them – there is a certain expediency in asking whether a different method and paradigm would lead to a different result. This, of course, does not amount to a plea for the return to old theories *tout court*, nor does it imply that the original authors' ideas can directly and immediately be applied in a new and different theoretical context. Rather, it provides some counterfactual food for thought.

On the other hand, a "competitive view" of economic paradigms, in which different perspectives emerge and extinguish themselves for many reasons related to the sociology of knowledge, as opposed to a "cumulative view", according to which there is an incessant accumulation of knowledge that makes each generation of economists wiser than the previous one, suggests that some good ideas – far from having been completely embedded in the body of subsequent science – may have been lost in the process. Thus it seems an opportune moment to examine whether earlier authors may provide a source of inspiration to today's economists.

The analysis proposed here ranges from theoretical issues of economic method to empirical applications in terms of economic policy. This wide range may be another cause for curiosity or even skepticism. However, it is not the aim of the present work to pronounce the last word on each topic incidentally dealt with, nor even to tackle them all thoroughly. The wide scope of topics is rather meant to provide as detailed a picture as possible of what I mean by diversity and in what sense it is a different (and possibly more useful) concept than heterogeneity.

In Part I of the book, Chapter 1 introduces the concept of diversity and develops the major line of the argument, while Chapter 2 provides a brief introduction to Mill and Schmoller. Part II of the book (Chapters 3 to 5) is devoted to methodological issues, especially focusing on methodological individualism,[3] the use of aggregate analysis and the theory of individual and collective behavior. Part III (Chapters 6 to 9) deals with gender diversity; that is, those differences between men and women supposedly generated by social institutions. As mentioned, both Part II and Part III deal with these topics from a historical point of view, analyzing works by Mill and Schmoller and highlighting their relevance for the development of the concept of diversity. Finally, Part IV (Chapters 10 to 13) applies these concepts to the empirical study of recent labor market trends. This analysis will focus on the gender employment gap in Italy as a relevant case study.

These applications, whilst being in my own opinion sources of interest per se, offer a prize opportunity to ground my rather abstract argument in specific cases and examples, while allowing for an overarching and coherent line of reasoning. While it is recognized that single case studies cannot bear the weight of a definitive proof, it is hoped that they will suffice to introduce and put forward for discussion the concept of diversity and the relevance of shifting economic theory beyond the narrow limits of that of heterogeneity.

Why G. Schmoller and J.S. Mill?

Mill and Schmoller are two authors particularly relevant to the theme of diversity, for a number of reasons. My prime motivation for focusing on them concerns economic methodology and the history of economic thought, which descends from the specific period in which most of Mill's and Schmoller's research was carried out (see Chapter 2 for a brief account of the life and works

of the two authors). During the late nineteenth century, a substantial shift in the paradigm of political economy practiced by the majority of economists gradually took place. This revolution, as it is usually termed, fundamentally defined the methodology of most of subsequent economic science, and it is of special interest here because it determined the almost complete exclusion of the category of diversity from economic analysis.

With their economic analyses, the two authors were and are frequently recognized as protagonists of this shift: Mill as the cultural leader of British classical economists after Ricardo; Schmoller as the academic leader of the younger German historical school, who vehemently rejected aspects of the nascent paradigm in the context of the well-known *Methodenstreit* (the "battle on method" with the nascent Austrian marginalist school). Both authors contributed personally to the theoretical reflection and debate on the methodology of economics. In the light of their unquestioned influence on the economists of their generations and countries, their contribution is therefore of prime relevance.

As often happens to those who were once undisputed masters but have subsequently lost a doctrinal battle (usually posthumously), both economists became gradually less relevant. Their arguments have suffered oversimplification: for example, the German historical school has been depicted as a crew of naively empiricist and politically biased old professors; the "socialists of the chair". Alternatively they have been grossly misunderstood, with Mill portrayed as the forefather of subjective utility theory despite his icy negative reception of Jevons' *The Theory of Political Economy*. Yet, aside from any purely historical interest, both Schmoller's and Mill's positions appear nuanced and well argued from a multidisciplinary perspective. They may seem to be rather distant from the nascent marginalist approach, but their refusal of its method did not imply an undervaluation of the themes brought to the fore by marginalist authors, such as the need to consider human agency as a purposeful behavior (that is, to consider rationality and volition), or the role of incentives in affecting behavior. These themes will be discussed in greater detail in Chapter 4.

The second set of reasons for my interest in the two authors relates to the theme that will be dealt with in Parts III and IV of this work. Having employed a historical analysis in Part II to highlight the main methodological issues related to the consideration for individuals' diversity, attention will then be focused on the application of this concept to the economic analysis of gender diversity; that is, the difference in socioeconomic status related to being a man or a woman. During the second half of the nineteenth century, when Mill and Schmoller published most of their works, women's status in society was emerging as an important political issue. Both authors contributed to the debate on the origin and legitimacy of gender inequality, although from a strictly economic point of view. They are among the very few economists who placed in their major works – the *Principles of Political Economy, with Some of its Applications to Social Philosophy*, and the *Grundriß der allgemeinen Volkswirtschaftslehre*, the leading textbooks of the time in their respective countries – a complete discussion and several references to the debate on the origin and legitimacy of gender inequality.

While comments on specific issues such as women's wages or the regulation of their working time were occasionally dealt with by other economists, Mill's and Schmoller's contributions stand out for their comprehensive consideration of the general question of men's and women's status in society as a proper subject for political economy to consider. Both Schmoller and Mill dealt with the relation of the class of women to the class of men, and they located the origin of gender roles in power relations. They were both concerned with the legitimacy of such a state of affairs, and tried to predict probable future developments.

Their treatment of the subject in some passages may be partly composed of unoriginal syntheses of previous contributions, thus providing a synthetic view of the debates of the time. However, a relevant reason for studying their opinion on the issue is the cultural and charismatic dominance they enjoyed, as recognized leaders of their respective countries' economists, and as influential consultants of policy-makers – whether in Parliament, as in Mill's case, or from academia, as in Schmoller's.

Their interest in the *Frauenfrage*, or Women's Question, is occasionally mentioned by historians of economic thought but rarely analyzed. Instead, beyond the interest per se, it emerges from the analysis that Schmoller and Mill faced an economic context and social institutions not dissimilar from our own, and their discussion on gender issues features insights relevant to contemporary policy-making. Moreover, the analysis in Part III of the book shows that the two authors' accounts of gender relations cannot be considered as an *addendum*, separate from the bulk of their economic analyses; instead they are based on – and affected profoundly – their economic analysis of social institutions, of individual and collective behavior, the societal capacity to reproduce itself and most notably the study of the division of labor. Thus, the historical investigation of Mill's and Schmoller's economic thought, if unaware of their analyses of gender relations and of the sexual division of labor, proves at least somewhat incomplete.

Schmoller's and Mill's works are relevant examples of why economists should be concerned with diversity, both as an occasion for the profitable use of economic concepts and with the aim to refine and develop these very ideas properly – that is, both as the object and as the tool of analysis, respectively.

Why gender?

Part III of the book will analyze Mill's and Schmoller's positions on gender inequality, aiming towards an application within economic analysis of the concept of diversity. For the reasons mentioned above, gender is a convenient example because it allows us to highlight the difference between the concepts of homogeneity, heterogeneity and diversity, while at the same time allowing the continuing exposition of Mill's and Schmoller's works.

Throughout the present work I refer to *sex* as the set of biological (chromosomic) differences between males and females; to *gender* as the social outcomes thereof, different for men and women; and to *gender roles* as the set of norms

and expectations regulating the prevailing public opinion on the proper behavior of men and women. Consequently, by *gender diversity* it is meant the assumption that men's and women's socioeconomic statuses cannot be properly represented as two outcomes of the same process (least of all by a process of rational choice). Rather, differences in the rules of conduct to which men and women are subject – differences of power, the social influences on character and the reinforcing tendency of habit formation and of the adaptation of expectations to one's established condition – all imply that men and women live in fact in different social environments, or rather that the social environment presents itself in two very different forms to men and women.

Part of the feminist literature (for example, Gilligan, 1982) following an older tradition evident also in some passages by Schmoller and Mill, tends to affirm the presence of a further element of diversity, according to which men's economic status is determined more (or exclusively) by their rational choices within a constrained environment, whereas women's is more properly thought of in terms of completely different cognitive processes, often referred to as emotional or a-rational. Other authors (including Mill) believe that this supposed difference is not natural, but a product of the social environment.[4] While the view of two different behaviors – men's choice process and women's relational and interactive process – is compatible with the general concept of diversity, it is not necessarily a fundamental component of it. Rather, the degree to which this and other differences between men and women are considered as "original", as opposed to socially produced, is of chief concern to my analysis.

In general, the consideration of diversity – that is, the recognition that some differences are of social origin – does not prevent the concurrent recognition that some other differences are of biological origin (for example, bodily strength). However, to paraphrase Mill's opinion, once we start asking how far differences may be produced by society, we will soon appreciate that the share of difference usually considered to be biological is probably exaggerated.

As it turns out, gender is a convenient form of diversity to illustrate the main argument. Indeed, Schmoller's and Mill's analyses allow us to deal with such central topics for the identification of a social origin of differences as education, habit formation, the division of labor, property rights and social and economic power. Thus, both authors provide valuable insights for the interpretation of gender differences in terms of diversity, as generated in particular by eminently social processes, such as education and the division of labor. By contrast, the two authors differ to some degree in their treatment of heterogeneity. Heterogeneity between men and women in the form of differing suitability to certain tasks constitutes a crucial hypothesis for Schmoller's analysis, especially for his tenet that the current sexual division of labor is an efficient social institution, including the policy implication that it is women who should rightfully carry out most unpaid household activities. Instead, Mill's policy proposals implicitly allow for heterogeneity among women, and separately among men, as an argument in favor of fair competition as the final means to discover who is "fittest" for certain occupations. On the whole, Mill tended to deny heterogeneity

between the two sexes in the form of systematic differences (for example, of productivity or innate skills) or rather to consider the issue as not relevant to policy-making.

An application to the analysis of the labor market

The analysis of Mill's and Schmoller's works allows us to identify a number of factors that may be presumed to affect men's and women's socioeconomic status significantly: the sexual division of labor (within the household in terms of housework and caring activities, and outside of it between the public and private spheres); public policies, especially those facilitating the conciliation of private and public life; the relevance of unfair competition (especially in terms of gender segregation); and the roles of law, customs, and gender roles in determining individual behavior. On the whole these influences imply that it is not an adequate representation of the differences between men and women, that based only on parametric heterogeneity of preferences or constraints in the choice process.

This tenet will be considered in the Part IV of the book, introducing an applied analysis of men's and women's labor market experiences in Italy. The analysis focuses on employment, because employment and the ability to earn an autonomous income are highlighted in Part III as a major determinant of empowerment, and because gender employment differentials constitute a major policy issue in Europe, and in Italy in particular. This, however, does not imply an underestimation of the relevance of unpaid work in shaping gender roles and determining the sexual and social division of labor.[5] The focus on paid employment is indeed complementary to unpaid work, since the latter constrains the ability to engage in the former, while the dramatic increase in women's participation rates constitute one of the most interesting historical trends of the last century. The choice to focus on paid employment is related to the wide availability of data in a form that is more suitable to test some of the implications of J.S. Mill's and G. Schmoller's writings. Moreover, an analysis of employment more explicitly relates to the mainstream treatment of gender differences (and to some heterodox criticisms of the subjective utility theory), and therefore it turns out to be of particular use to highlight the differences between concept of heterogeneity and that of diversity within empirical analysis.

The case of Italy is here considered to be internationally relevant due to the dramatic differences in the socioeconomic, political and cultural environments across its regions, thus providing ideal conditions to test for the relevance of different social conditions on individual outcomes. Furthermore, Italy exhibits the second lowest women's employment rate in Europe (after Malta); though for many categories of women (for example, those with the highest level of education, or those living in certain regions in the North) employment rates are close to EU standards. Thus, not only does there appear to be sufficient variance to allow for statistical estimates, it also turns out that Italy is a prime example of the way in which many environmental factors compound to produce widely different outcomes.

Overall, there is no one-to-one relation between individual variables and individuals' heterogeneity on the one hand, and social variables and individuals' diversity on the other. For example, differences in educational attainments are expressed by a quantitative variable at the individual level. However, I refrain from interpreting this as a form of heterogeneity, as it may be more suitable to represent education as a partially socially determined outcome. In such a case, differences in education may be better understood in terms of qualitative differences related to social status and condition, rather than quantitative exogenous differences determined by individual preferences. Hence, I will tend to interpret as forms of heterogeneity those differences that are clearly quantitative differences of outcome supposedly arising from the same process for both men and women (for example, aging) that can in no doubt be considered as independent from society. In Mill's terminology, I will consider as exogenous only the "residuum"; that is, those forms of difference that do not submit to explanation in terms of social origin.

However, at the empirical level computational requirements imply that only a limited number of factors can indeed be made endogenous to the analysis. This is a limitation of the testability of theory, implying that only certain aspects of individuals' diversity can be accounted for at any given time, while most other interpersonal differences must necessarily be assumed to be exogenous. It is not, however, a limitation of the idea that gender difference is an instance of diversity, since highlighting even one mechanism of social determination of gender roles is enough to consider gender as an endogenous variable.

This reasoning is not devoid of concrete implications; indeed it emerges from the analysis that the determinants of the employment status of men and women are quite different. Thus, concerning policy implications, the analysis leads to relevant insights, concerning for example the role of tertiarization[6] and macroeconomic growth, or the identification of a positive role for both culture and public policy.

Concerning economic analysis, the work proposes a method to endogenize gender; that is, to allow for the socioeconomic milieu to affect the social impact of being man or woman. The analysis is thus instrumental in arguing that an approach based on diversity may in many cases prove superior to one based on heterogeneity, as it allows us to highlight a number of dynamics (the social determination of differences in behavior) that would otherwise be ignored by economic analysis.

The present work intends to highlight the expediency of a greater interest and involvement on the part of economists in differences between persons or classes of persons. However, by proposing a rather unconventional approach to economic theory, informed by methodological and historical as well as empirical and statistical considerations, it implicitly argues in favor of greater pluralism of methods and opinions among economists. Indeed, this is but another element of convergence between the disparate elements here investigated. Possibly with the aid of this humble work, it is thus hoped that Mill's words will gain wider consideration in the discipline:

That mankind are not infallible; that their truths, for the most part, are only half-truths; that unity of opinion, unless resulting from the fullest and freest comparison of opposite opinions, is not desirable, and diversity not an evil, but a good, until mankind are much more capable than at present of recognizing all sides of the truth, are principles applicable to men's modes of action, not less than to their opinions.

(Mill, 1859, II.36)

Part I

There is difference in difference

Diversity and heterogeneity

1 The night in which all cows are black?

It is convenient to define two possible concepts by which economic analysis may take into account differences between people, shedding some light on the many colors of economic agents. From a substantive point of view, I define *diversity* as the idea that some individual differences arise from society or from the economy (that is, from people's social status), implying certain roles in terms of the division of labor, and a group-specific set of constraints and rules of conduct (either legal or social norms) in terms of behavior. From an analytical point of view, I shall call diversity the set of inter-individual or inter-group differences that are endogenous to a certain theory; that is, those differences that the researcher seeks to explain, at least to some extent, by means of a certain social or economic story. On the other hand, I follow the mainstream use of calling *heterogeneity* those differences that are assumed as a datum for the subsequent analysis; that is, differences that the researcher does not seek to explain. Generally, heterogeneity does not refer to people's roles in society, taking the form of quantitative differences between persons holding similar positions in the social division of labor. In the bulk of the economic literature, heterogeneity usually concerns agents' endowments, preferences, expectations, information sets or cognitive abilities.

The main aim of this book is to show that recourse to diversity may at times prove useful for the study of economics, while arguing that the discipline itself – by no means the only so-called mainstream approach – currently focuses too much on the latter kind of differences, heterogeneity. In other words, contemporary economics to a large extent assumes rather than explains the existence of differences.

There are of course laudable exceptions, which I shall cover briefly in this chapter; however, they were hardly embodied within the mainstream of their respective fields or schools, being perceived instead as original and eclectic scholars, deviating from the topics and methods that all economists need to know. Sometimes these exceptions gave birth to interesting subfields of economics that nevertheless failed to enter the "core" of economic theory (in the sense of Lakatos, 1978) – that is, they did not (and do not) affect the way that all other economic issues are framed and analyzed. Two observations are necessary here.

First, heterogeneity is not a minor issue. Its assumption does not necessarily support normative backwards or conservative positions, implying that substantial inequality will necessarily remain the same. An exogenous variable is still a variable and not a constant; thus heterogeneity is a proper way to recognize the existence of some kind of difference or inequality, and possibly even to uncover its dimension. However, its adoption implies that the explanation of inequality (along a certain variable) is not the economist's job, and consequently neither is the eradication of its roots.

Second, the assumption of certain differences as exogenously given within a model does not imply that economic science is unable to explain them: they may very well be the object of other models or studies. This is not necessarily a problem since all theories, including general equilibrium models, are anyway of the *ceteris paribus* kind; a theory necessarily deals with a finite number of elements while taking all others (most implicitly or hidden) as exogenous. However, whether or not certain elements can be ignored (or assumed as constant) in handling a certain problem is an issue that should at least be subject to investigation, while the parcelization of subfields risks bringing about fundamental inconsistencies in the edifice of economic theory. This is the case with heterogeneity and the representative agent, for example; two hypotheses that one stream of literature has long shown to be mutually inconsistent (see below) while another still relies heavily upon them (see, for example, Chari *et al*., 2009; Woodford, 2009).

There is an asymmetry between heterogeneity and diversity, in so far as the variable (or variables) over which to investigate the presence of diversity (that is, the variable that we wish to explain with a theoretical model) is by necessity a choice of the researcher. By contrast, due to the impossibility of explaining everything at one time, every theory must assume many forms of interpersonal differences to be nonexistent, or exogenous at best. In other words, due to the *ceteris paribus* hypothesis we must implicitly assume individuals' heterogeneity (or even their homogeneity) over a number of variables of no immediate interest, even when we acknowledge and try to explain differences over certain other variables. For example, Part II and Part III of this book deal with gender differences while mostly ignoring differences of color, class and ethnicity. Due to our cognitive limitations we are always bound to select a limited number of topics for analysis while leaving others in the background. Thus, the consideration for diversity in some variables is compatible with the hypothesis of homogeneity and/or of heterogeneity in all other (exogenous) variables.

Concerning the theoretical status of the two concepts, notice that there is no reference in the definitions above to the logical time in which these differences are acquired (or present): to ask the extent to which differences are derivative or "original", and to attach the concept of diversity to the former kind of difference and that of heterogeneity to the latter, is in my opinion a slippery framing of the research question. Indeed, as the major exponent of methodological individualism (Hayek, 1946) recognized, humans are originally social. That is, self-contained and mature adults do not spring out of the ground like mushrooms

(to use Hobbes' metaphor), but rather humans are socialized gradually from the very moment of birth. Thus, the distinction between the two kinds of differences is between those that are explained by the theory (that is, the endogenous variables) and those that are assumed as given (the exogenous variables). It goes without saying that neither are all differences necessarily of social origin, nor should all be explained by recourse to economic models.

As mentioned in the definition above, to some extent diversity will usually consist of inter-group differences; that is, differences between aggregates of individuals arising from their belonging to (or being considered as being part of) a group. This is because it is hardly the case that single individuals enjoy a specific and unique social status. Indeed, as will be discussed in Chapter 4, aggregates of individuals may be conveniently defined by the researcher with the very aim of highlighting diversity along some dimension(s).

The issue of using aggregative analysis (that is, to depart from the stricter versions of methodological individualism) is fundamentally intertwined with the aim of highlighting a property exhibited by some individuals and not by others, hence showing a dimension of difference. As J.S. Mill notes, if a general word is used to denote a property (for example, "slavery" to denote lack of freedom), the collection of individuals who exhibit that property (slaves) automatically emerge as an analytical class. The problem of aggregation, therefore, though not the main focus of my analysis, nonetheless constitutes a major methodological issue to be dealt with in this work.

On the contrary, heterogeneity looks at individuals' differences independently of their belonging to any social group. However, also in this case, independence does not imply mutual exclusion, and heterogeneity may entail inter-group (average) differences, since nothing prevents the definition of two (or more) aggregates of individuals that also exhibit systematic differences of a non-social origin. Again, slavery is an example relating to the works of Schmoller and Mill. Both authors considered slaves' behavior as different from that of free persons due to the institutional subjection to which they are bound. However, differences between the two groups of people may exist also independently of societal factors: for example, the enslavement of a specific ethnic group can imply a systematic – parametric – heterogeneity between certain free persons' and slaves' bodily characteristics, without this difference being produced directly by society. As we will see in Chapter 8, the extent to which differences between men and women can be related to innate and biological sources, as opposed to their social origin, has historically been a crucial analytical question for the economic analysis of gender inequality.

Finally, while the aim of this work is to advocate in favor of a greater effort on the side of economists to understand the possible social origin of many interpersonal differences, the two proposed definitions do not imply that diversity will always be necessarily greater than heterogeneity. Rather, my argument rests on two considerations: (1) that many interpersonal differences are (at least partly) of a social and/or economic origin, and therefore economics should be employed in trying to explain them, regardless of how important other

differences of non-economic origin may be; (2) that differences of social and economic origin sometimes matter in the development of economic processes or in the determination of relevant economic variables, and therefore, for the sake of an analysis of these more "traditional" topics as well, they should not be ignored by the theorist.

The economic literature on heterogeneity

Heterogeneity is now a founding block of mainstream economic theorizing. As of September 2010, a query for the words "economics heterogeneity" displays 403,000 results in Google Scholar, 115 in EconLit, and reaches the maximum number of results allowed in the RePEc database. While it is not feasible to summarize all this literature, it is necessary to provide a short overview highlighting the main elements to be contrasted with the concept of diversity.

In microeconomics it is generally, though implicitly, recognized that heterogeneity is the ultimate source of the exchanges in most partial and general equilibrium models. In Schmoller's words: "the equality of men impedes the exchange" (Schmoller, 1904, p. 4).[1] Taking Edgeworth's box as a paradigmatic example, were agents not to have different preferences or different endowments, the core of the economy (the set of possible competitive equilibria) would be empty; that is, they would have no reason to exchange anything. As subsequent literature showed, exchanges and a division of labor can still arise under non-competitive conditions; for example, in the presence of static or dynamic economies of scale (Block *et al*., 2007).

For reasons of simplicity, the economic literature usually refers to parametric heterogeneity; that is, heterogeneity expressed by the quantitative variation of an independent variable, be it continuous (for example, age), discrete ordinal (educational attainment) or categorical (ZIP code). However, there are streams of literature – mainly within behavioral and experimental economics – which formally model individuals who, although belonging to the same social group (thus no diversity is involved) and behaving according to the same (choice) process, do not differ parametrically, but rather in the the objective function representing their behavior (for example, to capture cognitive differences). Thus in the field of microeconometrics an emerging new stream of literature (briefly reviewed by Conte *et al.*, 2009) is increasingly focused on the identification within a single model of three different forms of (exogenously given) systematic differences between individuals: (1) some that are correlated to observable characteristics, such as sex, age or nationality, determining a group-specific intercept or coefficient (*observed heterogeneity*); (2) some that take the form of individual-specific fixed or random effects (*unobserved heterogeneity*); (3) some that allow for individuals to be randomly or deterministically assigned to a group of subjects who follow a certain decision rule; for example, exhibiting myopia or hyperbolic discounting, that determines two or more group-specific objective functions that are not nested within a more general model (and thus cannot be reduced to a shift in the constant or in some coefficient, requiring the use of *mixture models*).

As colorfully explained by Harrison and Rutström (2008), this method allows one to "jointly estimate the parameters of each theory as well as the fraction of choices characterized by each. The methodology provides the wedding invitation, and the data consummates the ceremony followed by a decent funeral for the representative agent model that assumes only one type of decision process" (p. 133). However, for the aim of contrasting the nature and sources of individuals' differences, functional heterogeneity can be considered as conceptually equivalent to parametric heterogeneity in so far as it is – in the same vein – formally exogenous to the model and substantially independent of society. Moreover, to celebrate the funeral of the representative agent, parametric heterogeneity is sufficient.

Indeed in the field of macroeconomics, (parametric) heterogeneity has been shown to undermine the idea that aggregate variables can be obtained by simple summation (or averaging, or by any linear combination) of the respective microeconomic variables. As Lippi and Forni (1997) show, with a line of reasoning not entirely dissimilar, algebraically, from the Cambridge critique of the notion of aggregate capital, if a dynamic model is obtained by the summation of microeconomic variables the parameters of a macroeconomic function – for example, consumption expenditure as a function of income – do not stand in a monotonic relation with the relevant dynamic parameters of the individual consumption functions. This holds true unless we assume very specific distributions of the relevant parameters in the population (or unless we assume agents' homogeneity). As the authors remark in the preface, "this is hardly surprising, as aggregation as already been recognized as a major source of difficulty in many branches of economic theory and empirical economics" (p. x). Reference here is possibly made to the domain of microeconomics, where in the 1970s with the so-called Sonnenschein–Mantel–Debreu theorem (see, for example Sonnenschein, 1972) it was already accepted that aggregate market excess demand functions may be not be well behaved, despite the assumption that each individual's demand function is.[2]

A simple numerical example of how heterogeneity undermines the possibility to obtain aggregate variables by linear transformation of the microeconomic variables (for example, by summation or averaging) is provided in the Appendix. This neither implies that such anomalies are the rule, nor that they are a frequent occurrence, but that when there is heterogeneity they can happen. At the same time, although anomalies of the kind shown in the Appendix can emerge, we cannot label the aggregate result as "wrong", since even on these occasions the result is mathematically sound. Rather, it would be more correct to say that aggregate relations carry an economic logic partially separated from individual relations, due to the non-monotonic relationship between the two. The moral of the story, as mentioned, is that both aggregate analyses and micro-analyses are legitimate, though possibly only in their respective and partially separated domains.[3] What is not legitimate is the illusion that it is possible to develop microfoundations by simple summation (or linear combination); that is, straightforwardly to infer macrodynamics from the exclusive consideration of individual behavior.

Outside the mainstream, heterogeneity is frequently considered within agent-based computational models and the approaches based on the concept of complexity, as well as within econophysics (see, for example, Dosi *et al.*, 2006, 2008). According to Tusset (2010), it is the very consideration for individual heterogeneity that leads Pareto to conceive stochastic processes to be a more sound foundation for modeling aggregate trends. This example allows us to think of a particular and relevant sense in which interpersonal differences may be exogenous from social arrangements without being "original" or natural; that is, as a consequence of chance. Indeed, many authors were inclined to assume the apparently universal nature of Pareto's law of the distribution of incomes (that was found to apply to diverse settings and societies) as proof of the existence of natural differences between persons that would ultimately underlie the distribution of income in all societies.[4] Instead, as shown by Corsi (1995), for example, this regularity has a much simpler explanation in the emergence of a Pareto distribution in the aggregate as a consequence of random proportional variations of individual incomes (that is, by assuming that each year's individual income is equal to the previous year's plus a variation proportional to it, whose sign – positive or negative – is randomly determined). Indeed, if we were to develop an explicitly dynamic analysis, starting (or "original") conditions become increasingly less relevant, while the issue of history versus chance may become central to the distinction between endogenous and exogenous sources of difference.

The economic literature on diversity

Overall, heterogeneity appears to be a substantive argument for avoiding the establishment of direct and unequivocal links between microdynamics and macrodynamics, possibly implying the legitimacy of microeconomics and macroeconomics as two separate fields of enquiry for the majority of "daily" economic applications. The example of interpersonal difference that will be employed here is that of gender inequality, but in more general terms I argue that the proposed distinction between heterogeneity and diversity may also clarify some concepts in the more traditional debate about the legitimacy of the representative agent hypothesis.

For example, the argument originally put forward by Keynes to reject the equality between individual and aggregate saving does not hinge upon agents' heterogeneity, but rather it falls in the category of diversity. It rests on the consideration of two distinct sorts of agents with two different social roles: firms (that indeed are not even persons) and households.[5] While the former decide to invest on the basis (among other things) of the interest rate, the latter decide to save as a function of their disposable income. Thus, here the representative agent hypothesis is rejected because it avoids the crucial question of how the plans of two diverse sets of individuals are coordinated in the economy. As is well known, defenders of neoclassical economics legitimize the sole consideration for the determination of aggregate saving as a function of the interest rate

and of the representative agent's income on the basis of the hypothesis that price flexibility (in particular, movements of the real interest rate) always warrants the equality between aggregate investment and aggregate saving, thus making the analysis of firms' decisions redundant. In the subsequent debate, when criticizing this supposed mechanism of coordination, many Keynesians tended to stress the idea of market imperfections rather than the analytical distinction between different categories of economic agents that hold different positions in society.[6]

Concerning diversity in a more intuitive sense – that is, the difference between physical persons – I propose the concept of distinguishing the exogenously given heterogeneity from the theoretical consideration for (and attempt at the explanation of) differences of social origin. However, the same term and/or a similar concept can be found in other streams of literature within the social sciences, though frequently with different meanings.

The prime instance, from a quantitative point of view, is the managerial and business administration literature on "diversity" within organizations and diversity management (for a recent review see Shore *et al*., 2009). This stream of literature uses the term to imply any form of interpersonal difference, including what in the economic literature is usually termed heterogeneity, spanning staff and human resources' gender and age to religion, political attitudes and sexual orientation.

Related to this literature is the emerging new topic in political sciences and urban studies, originating from the popular works by Richard Florida on the role of political and cultural tolerance as as an instrument for increasing citizens' happiness and as an engine for economic growth. The initial works within this large and extending body of literature already contain the main argument to link tolerance and growth; that is, the hypothesis of the geographical mobility of the highly productive "creative class" (Florida, 2002; Florida and Gates, 2001). As does the previous one, this stream of literature – though explicitly focusing on the normative argument for diversity – ignores analytical diversity in the sense proposed here, usually assuming an array of given individual characteristics that are by and large unaffected by public policy, whose impact only affects the choice of where to live and work. Thus, this literature similarly rests on an approach of heterogeneity rather than diversity.

The anthropological and sociological literatures have traditionally devoted more effort to the attempt to describe and explain observed differences in terms of social institutions and processes. However, as discussed in the mini-symposium in the 2002 issue of *History of Political Economy* (Mirowski, 2002, and following articles) the debate between scholars engaged in these disciplines and economists ended decades ago.

Explicitly aiming at introducing some sociological insights within mainstream economic theory, an interesting attempt to endogenize some sort of individual differences may be found in the original works by Akerlof and Kranton (2000, 2008). They consider differences in terms of individual identity, defined as individuals' choice to identify with a given social image, which is defined in turn as

a vector of characteristics exogenously defined, presumably developed by social norms and public opinion. This approach has been criticized for its narrow perspective; for example, ignoring the social construction of identity (Fine, 2009), or the processes of identification other than choice (Davis, 2006). However, from the perspective adopted here Akerlof and Kranton's approach remains one of the very few attempts in mainstream economics to explain the socioeconomic determinants of difference among individuals (or rather between their identities). That it should do so by ultimate reference to individuals' rational choice and given preferences is almost a necessary consequence of the principal postulates of mainstream economics, as argued below. The other possibility is game-theoretic approaches to identity, though they usually postulate exogenous differences as the ultimate determinant of the outcome of bargaining. However, this feature of these models does not necessarily imply that they fall back into the category of heterogeneity since other models within mainstream economics (surveyed by Bowles, 1998) have shown that the approach is compatible with the endogenous formation of preferences. Thus, a final answer will depend on whether the model of identity choice is compatible with that of endogenous preferences.

As noted by Pollak (1978), the literature on endogenous preferences formation historically arose from the observation of dynamic inconsistencies in consumer demand in empirical works, and from microeconomic models of the household in which family formation and gender relations are a matter of choice and bargain. Since this literature is discussed in Chapter 11, it may be more useful to mention here the development of streams of thought in the same mainstream field that assume the budget constraint as a partially endogenous variable. For example, since the works of Zeldes (1989a, 1989b) it has been claimed that in a certain society the development and "depth" of financial and credit markets, that may depend on market failures and regulation, can relax or tighten households' liquidity constraints. Similarly, the literature on educational choices recognizes not only that the expected returns from education (the increase in income made possible by a higher educational attainment) depend on social institutions, but also that other variables such as family background are relevant as well (see, for example, Checchi, 2006).

As mentioned, the main limitation of these streams of literature is that they developed into specialized subfields of economics, mostly without affecting the core of the discipline. While a division of scientific labor is unavoidable, it suffers in this case from two shortcomings.[7] First, very few attempts at investigating the robustness of these new findings on the traditional major theoretical and methodological axioms of mainstream economics have been undertaken (see Chapter 13 for an application to the empirical study of employment). Second, possibly as a consequence or a cause of the previous point, these works did not develop into a rethinking of the pre-analytical vision of the economy. While most mainstream economists would deny that their approach implies or assumes an Arrow–Debreu world, it should be recognized that it hinges upon the idea of capitalist society as a place where goods and services are exchanged in anonymous market transactions, behavior being the result of full or bounded individual

rational choice, and social interactions assimilable to bargaining. The implications of this vision – which I call the marketplace view – for the consideration of individuals' diversity are discussed in the next section of this chapter. In general, it may be said that by representing social institutions (from political elections to family affairs) as markets, such a vision provides too narrow a scope for a far-reaching recognition within economics of the many possible social sources of differences between individuals. However, as the streams of literature show, this does not imply that mainstream economics precludes the consideration of diversity altogether.

Out of the mainstream, the economic literature has not entirely neglected the consideration for individuals' differences of social origin. Indeed, some heterodox schools make the explanation of individual and collective differences one of their characterizing tenets. While a thorough review of this literature is beyond the scope of the present work, it is useful to mention a few works and approaches. Since the work of Veblen, institutional economics[8] has always considered the impact of institutions on individual behavior. Similarly, the Marxist and radical political economy approaches used to base many of their analyses on class structure and class relations, later enlarging the view to encompass the study of the social relevance of race and ethnicity, though some commentators within these very approaches argue that the contemporary evolution of Marxian thought privileged the study of capitalism as a whole at the expense of analyses based on class (Norton, 2001).

Besides gender, considerations for class, race and ethnicity have become common practice for feminist economists. Thus Folbre (1994) considers a plurality of simultaneous identities in each individual and even denies any superior prominence of gender over the many other "structures of constraint". Gender, race and ethnicity may at first appear to be prime candidates for heterogeneous classification, as it is unreasonable to attribute certain bodily characteristics to societal influence. After all, it is not society that deciphers whether we are born male or female.[9] However, closer inspection of these streams of literature reveals that the crucial questions for the economist are whether and why certain personal characteristics acquire an economic significance; for example, being correlated with lower income. Indeed, society did not cause us to be born blond-haired or tall either, but one does not see why these characteristics are almost irrelevant while gender and race are not. It is in studying these aspects that feminist scholars conceptualized the difference between *sex*, that is the set of chromosomic characteristics that (imperfectly) distinguish male and female individuals, and *gender*, the social significance of being men or women in a certain place and time. In the study of the social and economic causes of racial or gender inequality, or of the economic consequences of these differences, these factors fall clearly into the category that I label diversity.

The distinction between sex and gender is related to the century-long issue of "nature or nurture" and brings us to the definition of "analytical equalitarianism" (Peart and Levy, 2005; see also the symposium in the July 2008 issue of the *American Journal of Economics and Sociology*). According to Peart and Levy,

classical British economists assumed that all people are born alike and that personal vicissitudes make us different. They term this hypothesis of original homogeneity "analytical egalitarianism", and contrast it with "analytical hierarchicalism", the idea that some people are born qualitatively superior or better than others.[10] The reason for Levy and Peart contrasting homogeneity with hierarchy, rather than with a more generic "difference", is that they trace historically the abandonment of analytical egalitarianism on the side of economists with the rise of the doctrine that observed differences in the kind and degree of economic development between populations are due to natural variations between races. This doctrine was clearly backed by some influential fathers of marginalism and lead what Levy and Peart call "post-classical economics" to ignore the social origin of differences, up until the Chicago school with Knight's explicit opposition to this view, and notably Becker's works on the economics of discrimination (Becker, 1971).

Levy and Peart's position has been criticized, in particular by Hoover (2008), who noticed their conflation of analytical egalitarianism (the scientific approach of modeling people as all alike) with substantial egalitarianism (the descriptive statement that people are indeed all equal); and by Persky (2008), who proposes at least eight different meanings of equality, ultimately pointing out the distinction between Levi and Peart's *analytical* egalitarianism and what I call *normative* egalitarianism; that is, the position that people should be treated as equal. As a consequence, Levy and Peart (2008) modified their definition of analytical egalitarianism into an approach in which "differences among types of agents are endogenous to the model" (p. 473). They explain that analytical egalitarianism does not imply substantial egalitarianism. On the contrary, classical economists were well aware of inequality, but they assumed these differences to be of a derivative nature ("*all* differences are explained by the working out of the model", p. 473, my italic). It is thus an egalitarianism of original characteristics, before people enter society. From a methodological point of view, it is an *as if* position.

After the correction in 2008, Levy and Peart's analytical egalitarianism does indeed appear close to my own definition of diversity, apart from the different emphasis of terminology on original equality (their definition), as opposed to acquired difference (mine). However, at least two qualifications should be made. First, since Levy and Peart could not update the entirety of their book in reply to a comment, their treatment still seems to contrast a hypothesis of difference as opposed to a hypothesis of homogeneity, whereas my approach is much more focused on the contrast between differences assumed to be produced by society (diversity) as opposed to differences considered as independent of society (heterogeneity). Second, as already mentioned, independence of social processes (in the case of heterogeneity) does not necessarily imply "original" difference or "natural" attributes. As mentioned, the idea of an original or natural state of human individuality, which putatively would come before entry into society and would logically be contrasted with the state of being in society, strikes me as an ambiguous concept. Thus, with respect to heterogeneity, reference to *unexplained* difference seems to be a much safer harbor than original difference.

While these qualifications may appear as abstract and overly pedantic, they have a direct consequence on how we consider the current mainstream approach in its theoretical allowance for and explanation of inequality, as shown in the following paragraph.

Visions of the economy

To explain my own position on the implications of the departure from classical to marginalist economic thought for the consideration of diversity, it may prove useful to refer to what in Schumpeterian terms we may define as the pre-analytic vision of the economic system; that is, a researcher's general idea – the visualization indeed – of how the economy works. The pre-analytical vision is necessary to ask even what data to look at, how to approach social questions, and how to frame research questions.

The more details we put into the account of an economist's or a school's vision, the more cause for disagreement we find among historians of economics. Furthermore, it is indeed difficult to define clear concepts that encompass the changing opinions and even fierce disagreements between economists that we try to include under the same label, despite their perception of themselves as scientific competitors. However, this exercise will nonetheless prove useful in order to introduce Mill's and Schmoller's general framework of economic theory, necessary to understand the details that will be dealt with in the rest of this work.

Loosely speaking, we may consider two different families of visions of the economy (Roncaglia, 2005): I shall call one the *market-system vision* and the other the *marketplace vision*, without necessarily siding with either. British classical economists, following a tradition of thought that slowly established itself after the works of William Petty, Richard Cantillon, François Quesnay and the Physiocrats placed the division of labor on centre stage. The crucial research question for them was one that we may call the issue of the viability of production: in a society in which everyone is specialized in the production of one or a few goods (and services) while he or she has to buy, in the market, all other goods necessary for his or her consumption, most notably all the tools necessary for productive activities, how is it possible that exactly the right quantities of each good are produced, sufficient for the survival of the population and for the continuation of production of all goods and all the necessary instruments?

Not by chance both Petty and Quesnay were acquainted with human physiology, and compared the working of the economic system with that of the human body, whereby (according to the doctrines of the time) many organs work in coordination thanks to the constant circulation of blood. In the economic system, viability is found thanks to the equilibrated circulation of goods and services in exchange for money. I shall call this the *market-system vision* of the economy.

A good way to visualize this picture is by thinking of Cantillon's consideration of a society divided into the production of agricultural goods in the countryside and manufactured goods in the cities (with the nobility acquiring goods from both sides, financing their consumption was income from rents).

While one of Adam Smith's great contributions would be conceptually to separate the geographical (country–town) division from the division in productive sectors (agriculture–industry), the more imprecise urban–rural divide conveys the idea of recurrent (even routine) exchanges taking place between producers and the suppliers of their means of production. The farmer needs utensils produced in the town and the urban artisan needs raw materials and food farmed in the country: these exchanges, under the market system vision of the economy, may be more relevant (from an analytical point of view) than exchanges between producers and final consumers. Furthermore, they are usually based on the repetition of traditional behavior and cultivation of long-established productive and social relations, at the time dominated not only by habit but also by strict rules of conduct on how to run a business, what instruments and materials to use, what models and forms of the final product are admissible, and what prices and wages to pay (hence Adam Smith's advocacy of a more free organization of the market).

This vision usually leads economists to think of value in some objective way, with reference to the costs of production or specifically to the labor necessary to produce a certain good. However, as is well known, a stricter definition of the theory of value held by British classical economists, and in particular by Ricardo, is cause for disagreement among historians of thought. As it turns out, the present analysis will provide arguments for where to place J.S. Mill's works on this issue (see Chapter 5).

What is less up for debate is the relevant turn of perspective that characterizes the so-called marginalist revolution. Implicit in the methodology of Jevons, Walras, Cournot and Marshall (though only to a lesser degree in Menger) is a vision of the economy in which the problem of the reproduction of society is automatically solved by price movements: if on a certain occasion one of the goods or services should happen to be demanded (either for use as a means of production or for final consumption) in a greater quantity than is currently available, its price in the market will increase, thus inducing both a reduction in demand and an increase in its supply. Thus, from Marshall onwards, the question of how a decentralized division of labor may warrant the reproduction of society without any external regulation or intervention became an increasingly peripheral theme, the answer being gradually taken for granted due to the assumption of competitive conditions in most markets (notice the plural).

From the old idea of blood circulation, the image we may now refer to in order to convey the main ideas of the new paradigm is Turgot's metaphor of communicating vessels: each good is exchanged in a market that is separate but connected to the markets for the other goods, and price modifications compensate two or more opposite disequilibria (the idea that for each excess demand in one market there must be some excess supply in another market has been explicitly highlighted by Say and, in later developments, formalized by Walras' law). Under this perspective the important questions concern the organization of these single markets, where by "market" we mean the production and consumption

(sometimes even simply the exchange) of a specific good or service. There a shift of attention from production to exchange takes place, and economics becomes the study of the allocation of finite resources among several possible uses, for the satisfaction of end consumers.

This pre-analytical perspective may be visualized as thinking of the economy through the analogy of a medieval fair or a modern stock exchange: a specific place in which at a precise time all those who want to buy a certain good and all those who want to sell it simultaneously meet, and one-off occasional and anonymous exchanges take place.[11] After this analogy, I call this perspective the *marketplace vision* of the economy. What is crucial from our perspective is that exchangers are not socially embedded; they exist individually before arriving in the marketplace, and are endowed with goods to offer and preferences that determine their demand. Even if the exchangers were firms, in the economy they would use existing resources (land, labor and capital), given by God or nature, or somehow exogenously fixed by a distributive mechanism independent of the economy.

One of the concepts that deserves mention as it will be employed in the following chapters is the resulting definition of competition. With the British classical economists, the ideal of *free competition* entails the absence of relevant barriers to entry and to exit from a certain business or occupation. It is capital, or better capitalists, who compete for the attainment of the maximum possible rate of profit, by moving capital to the most profitable employments and by doing so producing a state of substantial uniformity in profitability across all industries (that is, a near uniformity of the profit rate). Here the role of the state is to set up a system in which the accumulation of power (feudal, political or even monopolistic power) does not produce barriers to entry or obstacles to the free movement of capitals. By contrast, under the marketplace view, *perfect competition* is a situation in which many sellers and many buyers of a single product bid against each other in pursuit of obtaining the best price possible. As is well known, in the absence of external interference in each industry there will only be one price for all the simultaneous exchanges, precisely set at the value that equalizes the quantities demanded and supplied in the aggregate.

The different perspective may be better grasped with an example that will be analyzed in greater detail in Part III. Under both visions of the market, we may consider discrimination as the origin of gender occupational segregation.[12] However, since discrimination is a breach of competition, the two different definitions of free and perfect competition lead to different hypotheses. Under the market-system view, discrimination will occur in the form of barriers to entry that are higher for women in certain occupations than others, thus leading respectively to their under-representation and over-representation (this was J.S. Mill's position, for example, as shown in Chapters 8 and 9). Under the marketplace view, discrimination may take the form of a refusal to hire or the offer of a lower wage to women, thus leading to their choice to find employment in a more convenient occupation (the example is aimed solely at highlighting the different hypotheses on the working of the market, while many other explanations other

than discrimination have been put forward to explain gender segregation, especially in the most recent literature adopting the marketplace view).

The market-system vision and the marketplace vision are to different degrees – and with different specifications – diffused in many historical periods of the history of economic thought and have coexisted with mutable fortune. Indeed, they are not diametrically opposed and their difference frequently concerns more the emphasis on which mechanisms are perceived as dominant in the development of capitalism (for example, competition in the market as opposed to competition of capitalists) or which research questions are more relevant, than a denial of the dynamics highlighted by the other school. Thus, it is not the case, for example, that British classical economists denied a role for supply or demand in influencing the market price. They would say, rather, that in general costs of production are more fundamental, they determine the natural price, while to some economists market price oscillations are little more than a temporary accident (for Mill's position, see Chapter 5). What changed substantially with the so-called marginalist revolution is the vision held by the majority of economists, the definition of mainstream economics. During the transition from classical to post-classical thought, the difference between the two pre-analytical visions was more in tone than substance. It concerned the method and hypotheses deemed acceptable and it directed the researcher's attention towards certain questions rather than others. However, for its impact on the conceptualization and even the terminology adopted, the shift in the vision implies several consequences in terms of different analyses and policy proposals, as clearly highlighted within the debate on Sraffa's interpretation of Ricardo.[13]

While this account is substantially Anglocentric, it can be shown that the market-system view represents some parts of the younger German historical school's vision as well, and Schmoller's in particular, provided that certain amendments are made. Perhaps the most crucial one concerns the theory of value and prices, in which Schmoller's treatment "was not too far away from mainstream neoclassical economics – and constituted all in all a rather incoherent analysis" (Schefold, 2008). In particular, as shown in Chapters 2 and 7, a crucial addition by Schmoller to the general framework sketched above is the consideration for non-capitalist elements, according to the traditional definition, that he perceived as being in place in market societies as well. Thus, within the public administration and large corporations, as well as within the family, the division of labor is not of the decentralized competitive (market) nature, but instead is based on hierarchy and purposeful planning. The state does not enter into the picture with the sole aim of setting up basic social institutions, such as the rules for a good functioning of the market, as it was with the British classical economists. Rather, a specific role for the public authority remains: to mediate, in light of its neutral standing, between conflicting interests (for example, between labor and capital), whose struggle if left alone may produce harm for society as a whole. Furthermore, it is to portray a definition of a good society and to try to bring the economy and society there by active intervention. Thus, in Schmoller's

view the state is a founding part of the market society; returning to Cantillon's image, we should now bring the castle to the foreground, on a par with the town and the countryside.

One of the major consequences of this integration is the recognition that different parts of the economic system follow different laws of development, and the synthesis of social development rests on the interaction between the market, the private and the political sphere. Thus, Schmoller's version of the market-system vision features as a central element the multidimensionality of individual and collective behavior, aimed at different goals in different contexts, and in which economic rationality (the "acquisitive instinct") is only part of the story. Such a vision of the economy, or rather of society, is compatible with a conceptualization of socially determined differences arising not only from market mechanisms but also from social processes related to the household or the public sector, significantly extending the scope of social analysis beyond mainstream economics.

Consequences for the analytical status of diversity

This discussion is relevant to the topic of diversity because the marketplace view has received a detailed mathematical formulation that allows contemporary economists to be very precise and unambiguous in the identification of the theoretical variables they refer to and on the nature of their relations (that is, it significantly simplifies the task of operationalizing concepts, though not necessarily also that of finding real-world measures of them). However, as it turns out, strict formalization constrains economists' ability to represent and treat analytically interpersonal differences. To express the point in overly simplistic terms, a view of the economy in which fully fledged adults, with no background and no social commitments, meet simultaneously to exchange their exogenously given endowments is more easily able to accommodate explanations of inequality based on heterogeneity than on diversity.[14]

More precisely, two parallel historical trends concur to the abandonment of the consideration of differences of social origin. On the one hand, the process of separation and specialization of the social sciences made the broader picture of society almost uninteresting for the economist (thence the common accusation in the field of development studies against economics as entailing a one-size-fits-all abstract and superficial approach). On the other hand, two methodological choices were historically related to the shift in the vision of the economy, though they were not necessarily attached to it: methodological individualism, and the representation of all behavior as the result of a constrained rational choice.

Due to these two ancillary postulates, in a competitive capitalist economy interpersonal differences can ultimately emerge only from individuals' preferences and/or from their endowments – that is, the two factors determining the outcome of a maximizing choice.[15] In other words, under this approach the original source of difference, possibly after a number of intermediate passages, rests on unexplained data. For this reason, next to the problem of aggregation the

issue of the economic representation of individual behavior will prove a central topic in my discussion (Chapter 4).

Clearly enough, with this approach society and the economy (especially in the case of non-perfect competition) may still work in a way that magnifies these exogenous differences, making very small (marginal) natural differences the origin of very large social inequalities (see Chapter 11), or it may attach a disadvantage to abstractly neutral exogenous characteristics. Indeed, my discomfort with these sorts of accounts is not that they would conceal or would be unable to consider interpersonal differences (as mentioned, heterogeneity may be as large or even larger than diversity), but that they imply a failure to search for a possible social and economic origin of these differences.

Conversely, among economists holding a market-system vision of the economy, the crucial question for an understanding of diversity is the author's views with respect to the origin of the division of labor. This was already clear by the time of the classics: for example, Thomas Pownall (former governor of Massachusetts) in 1776 wrote a pamphlet in the form of a letter to Adam Smith on the *Wealth of Nations.* There, Smith contented that men (and women?) are originally born much more alike than is commonly recognized, but as a consequence of the division of labor some are employed in intellectual employments while the vast majority of workers face the consequences of its major shortcoming:

> the understandings of the greater part of men are necessarily formed by their ordinary employments. The man whose whole life is spent in performing a few simple operations, of which the effects are perhaps always the same […] has no occasion to exert his understanding or to exercise his invention […] He […] generally becomes as stupid and ignorant as it is possible for a human creature to become.
>
> (Smith, 1776, p. 368)

To Smith, as is well known, the origin of the division of labor is not some original difference of endowments but is rather the human propensity to barter, truck and exchange. In response, Pownall (1776) recurred to a stream of thought widely diffused at least since Plato (who in *Republic* held that men are naturally born into one of the three classes of warriors, workers and philosophers) and Aristotle (who in *Politics* backed the idea that women and slaves are naturally born into their social roles, as subordinate beings), responding to Smith that the division of labor should instead be seen as a consequence of men's original differences, which induce a specialization of occupations and that naturally allocate each worker to the job that best suits his characteristics:

> I think you have stopped short in your analysis before you have arrived at the first natural cause and principle of the division of labour. […] Before a man can have the propensity to barter, he must have acquired somewhat, which he does not want himself, and must feel, that there is something

> which he does want, that another person has in his way acquired […]. Nature has so formed us, as that the labour of each must take one special direction, in preference to, and to the exclusion of some other equally necessary line of labour, by which direction of his labour, he will be but partially and imperfectly supplied.
>
> (Pownall, 1776, p. 5)[16]

As Peart and Levy (2005) report, the concept of a natural supply of abilities (or in modern terms, of productivity) similarly underlies the subsequent discussions in the Anglosaxon literature concerning the role of race in human and social development, especially following the excitement produced by Darwin's works. John Stuart Mill's contribution to this discussion will be examined briefly in Chapter 8.

Smith's position indeed conflates analytical and substantial egalitarianism, implying that original interpersonal differences do exist, but that they are concretely of secondary relevance in the development of people's individuality, especially with respect to the dominant role of the division of labor. Due to this observation the social scientist is entitled to disregard these innate differences, at least as a first approximation. As mentioned above, discussions of the sort (the "nature or nurture" debate) may belong more to the field of metaphysics than economics. Here, instead, we are concerned with the sole analytical aspect, implying that it is the economists' task to consider both sources of difference, social and exogenous, but in particular to focus on those produced by society – not only because that is the economists' place in the division of scientific labor, but also because socially created differences can be questioned and possibly modified.

This story, at this preliminary stage, is what using Blaug's terminology we may refer to as rational reconstruction, showing that a certain paradigm is more logically fit for addressing some issues and adopting certain techniques than others. However, as will be shown in the concrete case of the consideration for gender differences (Chapters 6 and 11 in particular), there is a historically coherent story behind this sketchy description. Thus, without denying the possibility of different – even opposing – positions to the historical reconstruction proposed here, my hope is that the following chapters will show that this is at least one of the possible meaningful interpretations of the crucial difference between the two aforementioned visions of the economy.

What remains as an interesting open question for the historian of thought is why then, if certain alternative approaches to mainstream economics, thanks to their different visions of the economy, are in a better position to grasp the economic relevance of – say – class inequality (the Marxians), the distributive conflict between workers and capitalists (the Sraffians), the different macroeconomic role of different sorts of agents (the post-Keynesians), or race and gender-based differences (the feminists), have they been on the whole, so far, equally unlikely to uncover and investigate the social and economic nature of the many forms of diversity other than their specific "favorite" one (with laudable exceptions). As

suggested by the previous discussion, a relevant part of the answer may impinge upon to what degree these economists accepted the idea that the division of labor reflects (rather than produces) a natural distribution of people's abilities: a hypothesis that would constitute a strong bridge towards the parallel marketplace vision tradition, since abilities in this case are ultimately a form of given endowment.

2 Lessons from the past

Inspiration for this work and fundamental arguments in favor of adopting a methodology of political economy aware of diversity have come to me from an analysis of John Stuart Mill's and Gustav von Schmoller's writings. Such an analysis allows for an interesting comparison of the two authors across a number of issues, but most notably provides insight that turns out to be of use even today.

Many historians of thought are surprised to know that in Italy there are two societies for the history of political economy. The separation illustrates the distance between an approach leaning towards cultural interest, the history of economists' lives and works per se; and one organized around a history of thought, where individual economists and epochs are less important than the theoretical content of their ideas. In this book I adopt the latter approach. Indeed, Schmoller and Mill are sufficiently different authors, facing substantially different social and cultural environments, that a thorough analysis of the authors' biographies and the relevance of their works to preceding and subsequent developments in history may be out of reach even for more skilled writers than this.

Moreover, there is a fundamental asymmetry in the status of the two authors with respect to the history of economic thought as a discipline. J.S. Mill is a well-known though controversial writer. There is much interpretative literature, which exhibits major disagreements concerning even the most fundamental issues. On the other hand, G. Schmoller is nowadays almost unknown to an Anglo-Saxon readership; his major works were not translated into English and it is only recently that a secondary literature in English is clearing the board of ill-founded prejudices surrounding the method and relevance of the German historical school (Peukert, 2001, attests to a "Schmoller's renaissance"). It is not an aim of this book to propose an original interpretation of the authors' works, nor to contribute to the debate surrounding their position in the historical development of the discipline. Nonetheless, some such considerations will naturally emerge from the analysis, which is instead mostly based on a direct exegesis of the authors' texts.

The present chapter briefly introduces the notions on Mill's and Schmoller's lives and works necessary to locate and appreciate their methodological and theoretical considerations more specifically related to the topic of diversity. Due

to the aforementioned asymmetry in this chapter I will focus on proposed interpretations of Mill's works, assuming that the main features of the theoretical background of British classical political economy are known to the reader; while I will provide an introductory summary of Schmoller's views on social and economic development, with a focus on his definition of historical stages for the sake of economic theorizing.

The life and works of John Stuart Mill

John Stuart Mill (1806–1873) was the son of James Mill, a brilliant British intellectual and friend of Jeremy Bentham and David Ricardo (whom he encouraged and helped to write the *Principles of Political Economy and Taxation*). James Mill wrote in the field of economics (most notably the *Elements of Political Economy* in 1821), and his reformulation of Say's law is considered the most lucid exposition among the British classical economists. He also wrote in the fields of politics and philosophy; in these fields his contributions will turn out to be relevant for our analysis, especially his cold, if not altogether hostile, position towards women's suffrage, and also his influential essay on associationist psychology (*Analysis of the Phenomena of the Human Mind*, 1829). According to this approach, the human mind is originally similar to a blank page, which with experience will be filled by way of association of one idea or "state of mind" (feeling) with another, forming "trains of ideas" in an almost mechanical way.

Possibly as a consequence of this belief, James Mill imposed strict discipline and a pressing schedule of education upon John Stuart, aiming at quickly and properly filling the blank of his mind, and at literally making a genius of him. John Stuart was taught mathematics from the age of three and could read Ancient Greek at six. In accordance with James Mill's philosophical radicalism and his utilitarian position in particular, much of John Stuart's education had been given to him by his father's friend Bentham.

Mill was prevented from bonding with children of his age, and the severity and coldness he had experienced as a child led him to suffer a nervous breakdown before the age of 20. As he would write in his *Autobiography*, John Stuart recovered by discovering literary and philosophical Romanticism (Coleridge and Comte will remain relevant figures in his later reflections), and in developing a greater respect and consideration for feelings and emotions. He also achieved a better grasp of and greater openness toward conservative social and political stances; although he was never to embrace such positions, Mill now considered them worthy of esteem. This attitude separated Mill, to some extent, from his father and from Bentham, who both responded to any argument not founded on reason with intransigent rebuttal. On the whole, it may be said that John Stuart Mill remained loyal throughout his life to the political and philosophical positions of his father and Bentham, but after their deaths he felt increasingly free to rework and develop these positions on his own terms, with noteworthy departures in the field of the theory of behavior, for example, or concerning the methodology of the social sciences.

We may say that James Mill's project was successful in so far as John Stuart quickly became an authoritative opinion leader in Britain, as the editor of the *London and Westminster Review*, and as the author of many articles (which he started publishing at the age of 16) and of some leading texts in the fields of philosophy and political economy, such as *A System of Logic, Ratiocinative and Inductive* (1843), *The Principles of Political Economy: With Some of their Applications to Social Philosophy* (1848), *On Liberty* (1859), *Considerations on Representative Government* (1861) and *Utilitarianism* (1863).

The main feature of Mill's work lies in his practice of merging cultural eclecticism with political reformism, with the aim of generating a system that is both theoretically defensible and easily accepted but also favorable to social change (Rosen, 2007). In his economic writings, the central problem of Mill's work is to identify the conditions for the orderly progress of society, where *orderly* means with full knowledge of and in conformity with the laws of evolution of the social system. For Mill, this effort amounted to an attempt to sanction a new body of doctrine, that would be able to command a quasi-unanimous consensus base among the cultural elite and, as a consequence, among the people.

Both from his works and from his life, it is evident that for Mill intellectual debate plays a major role in political debate. It has been claimed that Mill holds an elitist view of society and politics (see Skorupski, 1999, and the discussion in Hamilton, 2006): this is true at least in the two senses that consensus among intellectuals is most influential on the opinion of the higher classes – those with the power to reform policy – and that in his time the two classes coincided to a certain extent. In fact, Mill is particularly explicit in stressing the importance of consensus among scientists, especially in the social sciences where consensus was less likely, as a necessary condition to such scientists being perceived by public opinion as credible experts, and thus able to influence the political debate (Mill, 1865, p. 314).

Hence Mill's struggle to clarify the conceptual foundations of political economy, with two specific aims: to establish a common language and a shared analytical framework upon which scientific discussion can be fruitfully grounded; and possibly to create a comprehensive synthesis, with the ultimate goal of agreement on policy-making.[1] Reforms require a wider view than any single discipline can provide: according to Mill the economic vision of society ceases to be exclusive and exhaustive. When Mill decided to write *Principles* in 1845, he deemed economics a form of partial and historically relative knowledge. Partial, because it isolated a nucleus of relations – the productive and the distributive ones – from the united fabric of social phenomena; historically relative, because it referred to a stage of social evolution – the one dominated by exchange, competition, and accumulation – that did not prevail everywhere, nor did it constitute the inevitable or desirable arrival point for the development of society.

Mill refused appointments to prestigious universities because he did not want to express his views on religion publicly (possibly for the same reason he did not publish during his lifetime the work *Three Essays on Nature*). Besides the desire

to avoid compromising his agnostic position for the universities' required vow of fidelity to Anglicism, this position is possibly to be linked to Mill's strenuous defense of liberty (Zucca, 2006). By "liberty" Mill did not only mean the commonplace concept of an indefinite freedom to act within the boundaries of not harming others, but a more modern idea of privacy; that is, of protecting one's life from the unjustified intromission with one's choices and one's behavior from society, be it the state or most notably mainstream public opinion. As we shall discuss in the following chapters, Mill's sense of the pervasive – often blameful – influence of public opinion (that is, the opinion of the majority), is a fundamental building block of his theory of behavior. For the constraints it imposes upon minorities, the tyranny of the majority is also the main argument in favor of a representative government (that is, a parliamentary democracy) characterized by checks and balances, rather than a (theoretical) system of direct government.

While he served as a civil servant in the East India Company (a national public monopoly), John Stuart Mill was very influential among British intellectuals and his works were the most widely read textbooks there for almost half a century. He served as a member of Parliament for one term, during which he deposited the first formal proposal to extend suffrage to women, but he was not re-elected, possibly also as a consequence of his frank positions on the equality of the sexes (as he suggests in the *Autobiography*).

Mill's feminism was indeed not appreciated by the laboring class, whom as a progressive politician he tried to address directly, and was coldly received by women's movements as well. The latter (closer to socialist positions) often criticized his liberal stance and have recently undervalued Mill's role by ascribing the position of women in his writings to the influence of Harriet Taylor. Taylor was a lifelong friend of Mill, who met her as a married woman and led a bachelor's existence for 20 years only to marry her after her first husband's death. By means of a dense and frequent correspondence, Harriet Taylor contributed to many of Mill's works by commenting on different drafts and proposing amendments. According to Mill's *Autobiography*, while their common views on women's subjection were a cause rather than a consequence of their collaboration, her contribution was most heavily felt on the topics of socialism and of political economy. Mill ascribes to her intuition a crucial feature of the *Principles*, that of

> making the proper distinction between the laws of the Production of Wealth, which are real laws of nature, dependent on the properties of objects, and the modes of its Distribution, which, subject to certain conditions, depend on human will.
>
> (Mill, 1873, p. 255)

This distinction is most relevant for economic policy and theory. Its neglect (or rather its refusal) induced Schumpeter (1954, p. 543) to blame Mill for illustrating the laws of production in Book I and those of distribution in Book II of

Principles before the theory of value and of exchange, which is dealt with in Book III, despite Mill's recognition of it as the cornerstone of economic theory (see below). Indeed, Mill clearly explains the reason of this unusual organization of topics:

> The conditions and laws of Production would be the same as they are, if the arrangements of society did not depend on Exchange, or did not admit of it. […] exchange is not the fundamental law of the distribution of the produce, no more than roads and carriages are the essential laws of motion, but merely a part of the machinery for effecting it. To confound these ideas, seems to me, not only a logical, but a practical blunder. It is a case of the error too common in political economy, of not distinguishing between necessities arising from the nature of things, and those created by social arrangements: an error which appears to me to be at all times producing two opposite mischiefs; on the one hand, causing political economists to class the merely temporary truths of their subject among its permanent and universal laws; and on the other, leading many persons to mistake the permanent laws of Production […] for temporary accidents arising from the existing constitution of society — which those who would frame a new system of social arrangements are at liberty to disregard.
>
> (Mill, 1871, pp. 455–456)

The distinction between the kinds of laws is all the more relevant to the topic of diversity, in so far as by "laws of nature" and "nature of things" Mill means here unmodifiable properties of the objects of analysis (including persons) that are independent of society and therefore exogenous to economic theory (thus encompassing heterogeneity), as opposed to social laws that produce certain properties, including the forms of interpersonal differences that I call diversity. The latter phenomena, being the result of social mechanisms that are to some extent malleable, allow for active policy interventions. This is the reason for the analytical centrality that Mill attributes to the rejection of the idea that gender differences are innate or natural, an issue that he deemed much more relevant for policy than for biology.

The life and works of Gustav von Schmoller

Gustav von Schmoller (1838–1917) was different from J.S. Mill in terms of political aims, economic theory and method, as well as in writing, life and professional style. However, in the end the two were probably less the polar opposites portrayed by Schmoller in his *Grundriß*. As I will try to show in this book, there is more to Schmoller than having fought and supposedly lost a *Methodenstreit* (methodological dispute) with Carl Menger, and his position even in that story has frequently been misunderstood.[2]

Schmoller was the authoritative and powerful leader of the younger German historical school. As such, he was the advocate and chief practitioner of a

method of enquiry based on the study of facts and phenomena rather than on axiomatic deduction. However, it would be a great mistake to confound the positivism of the time with empiricism or unguided induction. As even Mill (the supposed great advocate of a purely axiomatic method in economics) wrote, "[…] from this time any political thinker who fancies himself able to dispense with a connected view of the great facts of history […] must be regarded as below the level of the age" (Mill, 1865, p. 308).

Indeed, a characteristic of the Romantic movement throughout Europe, that was to some extent shared by Mill, was a greater emphasis on the historical roots of contemporary societies. This shift of emphasis took place in the context of a positive reevaluation of tradition and conservation as a response to some excesses of the Enlightenment's obsession for rationalistic reform based on abstract ahistorical reasoning. Roncaglia (2005) highlights that there is indeed some polemical verve in this stance, and we should more properly distinguish two traditions of European Enlightenment. As a matter of fact, the whole period is sometimes reduced to the French rationalist tradition, confident in the ability of pure Reason to solve any problem and religiously believing in the possibility of making Man a perfect being (thus not too far from James Mill's approach towards John Stuart's education). This tradition should not, however, be confused with a "periphery" Enlightenment, mostly to be found in countries like Italy or Scotland, that was more related to the humanistic tradition; optimistic due to a sensitivity to historical development, but more skeptical on the supposedly infinite power of reason to achieve a perfect society. This approach, following Kant, was conscious of the imperfect though ameliorable nature of human beings. We may inscribe to this tradition such influential writers as Adam Smith and David Hume.

J.S. Mill was profoundly influenced by these writers as well as by the Romantic Spirit of his time, and therefore he agreed with many postulates of the nascent positivist tradition. He may have relied on deductive reasoning in political economy more weightily than Schmoller, but in the end Schmoller attacked him because his analysis was always aimed at its practical application and policy implications. As such, it dealt with the specific setting of the British society and economy of the day, and was much less informative on the economic analysis of other societies. Thus it may be said that Schmoller criticized Mill and the British classical economists not for some inherent flaw in their economic theory but for having assumed that the theory would apply to any historical and geographical context; or in Mill's case, for having frequently forgotten that it clearly did not.[3]

Indeed, Schmoller accused the British classical economists ("Smith's disciples") for having developed a "system of natural individualism". Thereby he simultaneously characterizes what he perceives as the abstract character of their science (assuming that economic laws are natural) as well as their antisocial political implications (summarized by reference to individualism). Commenting on J.S. Mill's work, Schmoller exhibits the same combination of scientific and ethical-political assessment:

> Since [Ricardo], his disciple and younger friend John Stuart Mill has dominated English political economy. He too, despite his universal culture, is stuck in the underbrush of individualistic natural law of the abstractly radical kind typical of the eighteenth century. He is a loyal follower of Bentham's utilitarian ethics; yet this school of thought, although well known for the idea of the maximum happiness of the maximum number of men and despite providing great benefit to the empirical psychological investigation of morals, nonetheless failed to grasp a deeper concept of state, of society and of the social economy.
>
> (Schmoller, 1900, p. 92)[4]

In the end, the economists of the German historical school criticized the British classical economists because they were interested in developing a theory that would be applicable to their own society. To do so they had to start by investigating what Mill called the "empirical laws" of Germany's (or Continental Europe's) economy. However, to many of them induction required much firmer foundations than what was the standard of the time, and possibly what was possible at the time. For this reason many scholars of the School produced works mainly belonging to the field of economic history – careful factual reconstructions and accounts rich in historical detail – without ever developing a thorough and coherent system of economic theory. Thus, Schmoller even levels against the older German historical school, a generation before his own, the accusation of founding its inferences on shaky ground:

> The difference between the new historical school and Roscher is that the former is more cautious in generalizing, and feels a much stronger need to shift from the polyhistoric collection of data to the specific investigation of single epochs, single populations, single economic conditions.
>
> (Schmoller, 1900, p. 119)[5]

Nonetheless, Schmoller, with his *Grundriß*, provided an extensive historically grounded work on economic theory (and policy), rich in generalizations and inference. This achievement was probably inspired more by academic considerations than by a definitive sense of scientific maturity from the beginning. Indeed, in Schmoller's note in the Preface to the first volume of the *Grundriß* he confesses his initial discomfort with the project of systematizing his historical researches and that of his followers, deeming that the time had not yet come for such an endeavor because it was necessary to accumulate historical evidence from one or two subsequent generations of scholars totally and uniquely devoted to that task. However, he adds that in time, after years of work, he grew increasingly satisfied with his magnum opus.

It is unfortunate that only three works of Schmoller's have been translated into English, among which is a short chapter of the *Grundriß* on class conflict (Schmoller, 1897). The other two are: *The Mercantile System and Its Historical Significance* (1910), the translation of a chapter of *Studien über die wirtschaftliche*

Politik Friedrichs des Grossen (1884); and "The Idea of Justice in Political Economy" (1894). As Peukert (2001) suggests, one of the reasons for this is that translations were not really necessary at Schmoller's time, when Germany was one of the leading countries for research and many American scholars traveled there to study (among American economists: Taussig, Ely, Seligman). In the field of economics, Schmoller's influence on them can not be exaggerated. More generally, the German historical school certainly influenced the approach of institutionalists; of Max Weber (who is frequently labeled as a member of a third-generation youngest historical school), Schumpeter, and Veblen. Their influence spanned the other social sciences, such as history and sociology, but indeed was also the result of a more interdisciplinary cultural movement (with the historical school of law, for example). Within economics, a similar historical and evolutionary approach – also developed in a theory of stages – may be found in Marx, among others.

Indeed, Pearson (1999) writes that the economists collectively labeled as German historical school would be better defined not as a school but as a number of scholars, limited neither to Germany nor to economics, who "[…] were the children of their own positivist age" (p. 550). He suggests considering them as practicing an evolutionary institutional cultural economics, rather than a truly historical one. Caldwell (2001) replied to this provocative thesis by pointing out the sociological value of classifying most German academic economists of the time as a school (headed by Schmoller). This convenience arises from Schmoller's rule over most German universities, well beyond Prussia, by means of his close friendship with Althoff, the officer in the Prussian Ministry of Education responsible for recommending appointments: "Schmoller could, of course, make sure that only those with the proper sympathy toward the historical approach were appointed to the *professoriat*. But equally important was a prospective candidate's views about the policies undertaken by the German state." (p. 653).

Thus, Schmoller exerted an influence on his country's economics and economists of a different kind from Mill, as he may be one of the first academic leaders in the discipline (or "one of the major organizers of research in the social sciences" as Schefold, 2008, writes). From the University of Berlin, where he served for thirty-one years and which he represented at the Prussian Parliament, he exerted a strong academic power over the hiring, promotion and incentives of economists at most other German universities.

His interest was not only theoretical; he founded and heavily influenced the *Verein für Sozialpolitik* (which still exists, as the German Economic Association) with the aim of influencing economic and social policy. He is believed to have influenced many Bismarckian policies profoundly, but some note that the inverse also applies, that is he is not remembered as having criticized many decisions of the Prussian Empire. This observation should not make Schmoller's vehement criticisms of the German condition go unnoticed, though. Schmoller believed that the state has great power to mediate between society's conflicting interests and to promote progress and the social good; he dedicated most of his

work not to abstract issues of method, for which he is mostly remembered today, but to social and political issues. He denounced the rapid historical development that lead to the emergence of capitalism, bringing about traumatic dissolutions of traditional equilibria and producing widespread poverty among the lower classes, as a consequence of urbanization and large-scale industry among other things:

> The new epoch has also taken on the destitute, languishing classes that have been mistreated for centuries. Suddenly left to their own devices and exposed to competitive struggle, these people have inevitably fallen behind at the same rate that those with greater means, the educated and propertied classes, have progressed.
>
> (Schmoller, 1874, p. 1)

In general, Schmoller held conservative views in the contemporary sense, which included a genuine concern for advancing the conditions of the lower classes jointly with a rejection of liberalism, Marxism and reactionary positions alike. He thought that economic and technical progress brought with it many positive consequences, especially by raising the material standard of living of the population, but also that this process should be not only managed but even directed by the state. In so doing, the state was to promote morality and the conservation of any good to be found in the old social and political organization. Indeed, as was common in his time, Schmoller perceived a strong correlation between poverty and immorality, along Malthusian lines.

Schmoller aimed at preserving and increasing Germany's power in the context of competitive nations, where by nation he meant not only the state but the sum total of a country's population, including all social classes:

> The seventeenth and eighteenth centuries seemed to us the birth hour of modern states and modern national economies; and, therefore, to have been necessarily characterized by a selfish national commercial policy of a harsh and rude kind. […] historical justice does not demand more: it gives its approbation to systems of government which help a people to reach the great goal of national greatness and moral unity.
>
> (Schmoller, 1897, p. 30)

However, in other passages it appears that this general orientation is indeed relative to the historical time in which Schmoller worked and wrote – he would have welcomed a new perspective based on international solidarity, had he believed that it was actually possible at his time:

> The progress of the nineteenth century beyond the mercantilist policy of the eighteenth depends on the creation of leagues of states, on alliances in the matter of customs and trade, on the moral and legal community of all civilized states, such as modern international law is, brings into existence more

> and more by means of a network of international treaties. […] Undoubtedly we must regard this movement […] as one of the great advances made by mankind. One might say that the seventeenth and eighteenth centuries created the modern national economies, and that the nineteenth has humanized their relations to one another.
>
> (Ibid.)

Schmoller held a political organicist view; that is, he believed that a nation, as well as many other aggregate entities which he called *social organs*, exist autonomously from the individuals that they are composed of, both because individuals often act collectively and owing to the fact that they feel themselves to be part of a unity (Chapter 3). However, for individuals to do so they must perceive this unity to be in broad agreement with their ultimate long-term feelings and interests. That is why Schmoller praised the advancement in living conditions for the great mass of workers brought about by capitalism. In the same vein, he consistently argued in favor of pro-working-class social policies with the aim of preserving and strengthening the feeling of national unity and of its inherent justice:

> The masses' sense of justice supports any existing distribution of property that seems in accordance, when even only approximately, with the virtues, knowledge, and achievements of the individual as well as the different classes. Conversely, however, every single system of property and income, no matter how many may have been known throughout the world, has succumbed over time if it no longer rests on that conviction.
>
> (Schmoller, 1874, p. 2)

On the interpretation of Mill's works

The historical analysis in this work is conducted mainly on the two authors' production in the fields of economic theory and methodology, although in Mill's case reference to other works will also be made. As mentioned, both Mill's and Schmoller's works are the object of contested interpretations, as summarized for example by Schefold (2008, 1993), Pearson (1999, 2001), Caldwell (2001), Streißler (1990) (on Schmoller), and by Zouboulakis (2001), Oakley (1994), Hollander (2000), Whitaker (1975) (on Mill). As described in the previous paragraph, scholars who analyzed Schmoller's works may debate relevant issues but substantially agree in opposing the traditional received view that Schmoller practiced history with no interest for economic theory. By contrast, historians are still divided a great deal over the interpretation of Mill's role in the development of Western economic thought. While such a topic is not the main objective of the present work, it will nonetheless present itself when a systematic view of Mill's vast scientific production is attempted.

For certain generations of scholars in England, *Principles of Political Economy, with some of their Applications to Social Philosophy* (1848) by Mill

represented the undisputed Bible of economic doctrine, the final synthesis of classical theory and of the improvements introduced by economists after Ricardo: indeed, this piece of work had ousted the *Wealth of Nations* (1776) by Adam Smith as the reference point for all those interested in economics. After its publication, the supremacy of Mill's text lasted until the ascent of the marginalist school, in the late decades of the 1800s. By the turn of the century *Principles* became of almost exclusively of historical interest, and was replaced in its reference role by Alfred Marshall's *Principles of Economics* (1890). Since then, economists have generally judged Mill's contribution to the formation of economic science as irrelevant, and analyses of Mill's works have been limited to political or methodological aspects.

Starting in the 1970s, however, the literature begins to reflect the opinion that Mill summarized the political and economic discussions of his time, and by so doing played a decisive role in the process of distancing economic theory from Ricardian doctrines. Evidently, this argument preliminarily requires a position on the political economy of Ricardo, about which one can distinguish two positions in the literature. One is put forward by those who share the interpretation of Ricardo proposed by Sraffa (1951), most notably Dobb (1973) and Bharadwaj (1978, 1983). They focus on the links between Mill's economic thought and the later thought of Alfred Marshall concerning the theory of value and distribution. Mill himself considered this topic central to the science of political economy:

> In a state of society, however, in which the industrial system is entirely founded on purchase and sale […] the question of Value is fundamental. Almost every speculation respecting the economical interests of a society thus constituted implies some theory of Value: the smallest error on that subject infects with corresponding error all our other conclusions; and anything vague or misty in our conception of it creates confusion and uncertainty in everything else.
>
> (Mill, 1871, p. 456)

On the other hand, the same link from Mill to Marshall is highlighted by authors maintaining different interpretations of Ricardo's theory, as Hollander (1976), Whitaker (1975) or recently Zouboulakis (2001), for example, with specific emphasis on Mill's methodology and on the theory of behavior. These authors see a continuity between Ricardo's deductive method and Mill's supposed (and occasionally declared) method of assuming a *homo oeconomicus* not dissimilar from Jevons' one.

As will become apparent in the following chapters, I maintain that relevant arguments exist against the representation of such a "transitory" role for Mill's works, which may be in part correct when concerned with the theory of distribution and value, but misleading when considering the theory of behavior. Concerning the former (analyzed in Chapter 5), Mill originally developed topics of it, and even integrated the original Ricardian framework with contributions from authors explicitly in opposition Ricardo's theory with the aim of establishing a

consensus among economists. However, it will come to light in the analysis that the fundamental vision of the capitalist society as a market-system (described in the previous chapter) seems just as fundamental to Mill's *Principles* as Ricardo's, and it requires us to consider Mill's treatment as firmly rooted in the classical tradition, despite the presence of what Bharadwaj called "corruptions".

On the other hand, as Sotiropoulos (2009) has remarked, a textual analysis of Mill's works lends inadequate support to the argument that Mill radically innovated economic methodology and the theory of behavior in a direction paving the way for Jevons and Marshall. On the contrary, in Chapters 4 and 5 it will be shown that Mill's economic analysis, being based on the aggregate analysis of social classes, does not require an in-depth analysis of individual behavior as a founding element. Mill's opinions on the relatedness of the social sciences and the rich conception of human conduct that emerge from his works on ethics and moral philosophy, and that are not contradicted by his works on political economy, actually lend support to the opposite view – against the *homo oeconomicus* representation of individual behavior.

This interpretation of Mill's works is part of my argument in favor of a greater consideration of the individuals' diversity within political economy, but it is certainly not the only possible reading of Mill. Indeed, several factors compound to make it difficult and possibly useless and misleading to try to produce a coherent and complete picture of the whole literary production of Mill. One should cite at least the very long time span over which he actively participated in the cultural debate; his own testimony in the *Autobiography* to having changed his mind during his lifetime (for example, from the initial orthodox Benthamism to more nuanced positions affected by the Romantic movement, or with the late abandonment of the wage fund theory); his purposeful research for the establishment of a synthesis capable of obtaining general consensus (referred to above); his writing with the aim of affecting the immediate political and cultural debate, hence certain shifts in rhetoric from one work to another; his cultivation of deeply held and articulated positions, frequently hard to summarize and straightforwardly classify into general categories or schools; finally, the possibility that in different contexts or at different times Mill may have written different, possibly contradictory, things – especially if read side by side from a contemporary standpoint. All these factors add to the more traditional difficulty of fully grasping the meaning of a few sentences or passages extrapolated from a text, which is particularly severe for works of political economy that are not mathematically formalized and therefore require textual interpretation.

Some of these arguments apply in Schmoller's case too. Moreover, we may have to consider his own initial discomfort with the attempt to synthesize the historical economic research of the time, because he believed the project to be both necessary and premature. While the contemporary academic writing style mandated the display of a certain scientific modesty, in the case of *Grundriß* it is a reasonable hypothesis that on many issues Schmoller deemed economic knowledge to be insufficiently developed and treated his own account as a temporary working hypothesis.

Thus, I shall try to develop and put forward a coherent view of the output of both Mill and Schmoller that can tell a meaningful story and provide an interpretation of their main arguments, while recognizing that alternative interpretations are equally defendable.

History through stages

Before analyzing Mill's and Schmoller's works in detail, it may be convenient to clarify in what sense Schmoller's analysis can be deemed "historical."

As I have mentioned, the historical approach is a common feature of social sciences in the nineteenth century. It emerged as a reaction to extreme rationalist methodological stances, in Germany especially in the field of law and most notably constitutional law. Among the main causes of the ascent of history as a method of the other social sciences are the development of archeology and ethnography. With the fall of monistic religious approaches to knowledge, and with the burgeoning diffusion of both fiction and scientific literature on travel and geographical explorations, the comparison of Europe's society and institutions with those of unknown populations had already become widespread during the Enlightenment. Comparative analysis has gone from being an autonomous literary genre to becoming a method of social analysis, as paradigmatically exemplified by Montesquieu's pioneering investigation of the influence of social institutions on individual behavior in *De l'Esprit de Lois* (1748).

Gradually, the search for causes and effects made comparative analysis look like insufficient grounds for scientific knowledge. In particular, the influence of Darwin's work spread the idea of evolution as a process of endogenous change through time. Thus in the social sciences comparison was substituted with temporal sequence and causation. By Schmoller's time "historicism" encompassed two main features of social analysis:

1 *Theoretical relativism*: the awareness that a theory can emerge from detecting regularities that are specific to time and space; therefore, the resulting law may fit a certain society at a certain time but no theory can fit all societies at all times.
2 *Evolutionism*: the recognition that any social phenomenon must be in some sense a consequence of what came before; that is, the causes of change must be sought in the previous social situation and not (only) in some exogenous process.

These considerations led many authors to adopt historical theories based on narratives of *stages*. Chronologies of stages were proposed in particular by the major exponents of the German historical school, possibly as a consequence of their distinctively multidisciplinary approach. As Schefold (1998) recalls, "the idea of economic stages is one of the most common and most ubiquitous in all of economics" (p. 405) and dates back to ancient Greece. However, "stages" may

be considered as having differing definitions and as being applicable to several uses within very different historical methods.

First, they may form a thorough *stage theory* of a certain phenomenon (or of society in general), as opposed to stages as a rhetorical device to summarize many unconnected facts. The historical tendency, as mentioned, is increasingly to detect causal connections and to systematize stages in an overarching evolutionist view of the phenomenon.

Second, the procedure of developing analytical stages resembles that of classifying individuals (as discussed in Chapter 3) and from certain points of view it may be thought of as the problem of aggregation applied to time rather than individuals. We may similarly distinguish two interpretations of stages among different authors: (1) they may be ad hoc theoretical simplifications of the complex set of social phenomena – when many variables (or rather the relations between many variables) have changed considerably, we may term the new situation a different "stage" for the sake of expediency and to convey the idea that new theoretical laws are required for the new situation; (2) alternatively, stages may correspond to the theory of the actual development of a new historical situation that the researcher believes to be qualitatively different from that coming before. In the former case we would speak of stages as ideal types, in the latter as real types.

Finally, the identification of stages may depend on a single criterion or many. As Schefold (1998) argues, "the use of a single criterion is theoretically more satisfactory than that of an ad hoc combination of several which, however, possibly does more justice to individual periods" (ibid.). Indeed, the method of identification of stages depends on the fact that stages serve different analytical aims. In the case of ideal types, as theorized by Weber, they are an instrument for the analysis of an issue. They need not be realistic and more than one may be necessary to understand an actual historical phenomenon (moreover, stages may overlap as social change can move at different speeds in different parts of society). In the more recent consideration of "economic systems", in many cases the aim was to develop a theory able to organize capitalism.

Schmoller refrained from developing a coherent stage theory of society. Generally speaking, his account of economic development in Western countries can be summarized as consisting of a first stage of *Hauswirtschaft* (home production), which is a system of large, self-sufficient family groups, where "family" does not denote affective linkages but productive units, organized in kinships but including slave labor. According to Schmoller, around the tenth or eleventh century most countries underwent a transformation towards a second stage of economic organization based on guilds and corporations, mainly operating in urban areas. The period between the fourteenth and eighteenth centuries is characterized by the emergence of territorial institutions (both political and economic), which, starting from the sixteenth century, evolve towards the formation of national states. Finally, with colonialism begins the epoch of a global interlinked economy.

However, this chronology is present in *Grundriß* alongside many other sequences of stages. Indeed, in his major work Schmoller would typically approach a topic in three steps. First, he would provide a detailed definition of the main concepts involved, frequently relying on the history of ideas. This approach may descend from the use of *Grundriß* as a textbook for academic courses of *Staatswissenschaften* ("state sciences"), a curriculum aimed at the training of civil servants characterized by the study of history, law, ethics, economics and management (similar to today's curriculum of political sciences in Continental Europe). A second reason may be that a clear definition of concepts is necessary for any measurement to take place, which is the third step in the theoretical exposition by Schmoller. Between the first stage of concept definition and the third of statistical portrait, Schmoller frequently develops a theory of the phenomenon by providing a historical account of its evolution. Thus, different phenomena may be better represented by different sequences of stages, both with respect to the number of stages and in their chronology.

This plurality of sequences of stages allows Schmoller to innovate substantially on a number of topics, including the study of gender relations, as shown in Chapter 7. Adam Smith may have not been the first but he was certainly the most explicit in distinguishing the geographical division of the economy (land and city) from the classification of industries (agriculture, industry, trade) and the distribution of income (rent, wages, profits), as noticed in the previous chapter. Within the historical method, Schmoller reaches a similar analytical improvement by applying in full the method of adopting separate periodizations for different phenomena. Indeed, it was traditional in prior literature to identify stages of social development and then try to fit any phenomena into that framework. In a nutshell, the story was usually similar to that summarized by Mill in the "Preliminary Remarks" of *Principles* and was part of the implicit background (possibly the pre-analytical vision) of British classical economists since Adam Smith.

In this account (Mill, 1871, pp. 10–20), mainly inspired by the growing knowledge of the living conditions of contemporary populations outside Europe, the first "age of the world" is the savage stage. Here people live mostly on the available produce of the land. They practice fishing, hunting and collect comestible plants. They are also frequently involved in predation and war, due to their extreme dependency on aleatory external natural conditions. With the domestication of animals and the production of very primitive tools begins the second stage, that of nomadic pastoral populations. Flocks and herds constitute the first form of capital that it is possible to accumulate and bequest. Therefore inequality begins at this stage. Inequality makes the production of surplus product – production beyond what is necessary for the survival of the proprietor of the productive capital – a possibility. Thanks to this surplus a first division of labor emerges. It is based on servitude of the harshest kind, given the extreme power imbalance between those who can secure survival and those who cannot. This power imbalance is self-sustained in so far as the destitute usually find employment in the protection and defense of the rich.

The presence of a surplus also allows for the exertion of "unproductive" activities such as leisure and primitive science. With it, innovation develops and the production of new tools allows for the shift to an agricultural economy, namely the third stage of development. Agriculture allows productivity at levels unthinkable in previous stages and it permits both rapid population growth and the creation of a large class of functionaries and personnel dependent on one or few landlords. Thus agriculture creates the conditions for the political tyranny typical of ancient populations. There, the prince accumulates sufficient resources to be able to (and desire to) make great displays of abundance, thus creating demand for large public works (such as the pyramids) and luxury goods. This is how long-range trade emerges, and a new social class of merchants and manufacturers with it. However, the development of culture, law and religion and institutions aimed at the preservation and even the increase in the current economic and political inequality, makes economic growth slow down, and population growth with it. The empires thus constituted enter a crisis and they become the sitting target of external populations. We now enter the Middle Ages, which bring about a new institutional framework that allows for the gradual substitution of aristocracy for the emergent class of merchants and manufacturers at the upper end of income distribution. Here, also as a consequence of the sedimentation of local customs and the national character, national economies and societies start diverging and the development of each country requires separate treatment.

From this brief account it is evident that in Mill's treatment, as well as in that of most British classical economists, the definition of stages of economic development is not only interrelated but indeed coincides with the stages of technological, political and social evolution. As will be shown in the following chapters, in Mill's works these stages also correspond to different theories of behavior and social interaction. By contrast, in defining several different chronologies of stages for different domains of social evolution (production techniques, political regimes, gender relations, religion, etc.), Schmoller enlarges the possibilities for economic analysis to identify a set of endogenous causal relations – summarized by the evolution of stages – that does not exclude the existence of other (exogenous) possible causal nexuses, summarized by the parallel evolution of stages of some other social domain. To illustrate this point, let us consider two phenomena, A and B, assumed to evolve in time as in Figure 2.1.

In the figure, the phenomenon A exhibits an evolution in three stages, while roughly at the same time B shifts from stage B1 to B2. While the movement from the stage A1 to A2 is here represented as an endogenous process (solid line in the diagram), the later shift to A3 is made possible or facilitated (dashed line) by the parallel evolution of B into a new stage, producing an impact that here represents an exogenous cause of change.

Schmoller expresses the concept at some length in his 1884 book, partially published in English in 1897:

> To pass judgment as economists upon a whole historical period necessarily involves a comparison of it with what preceded and what followed; involves,

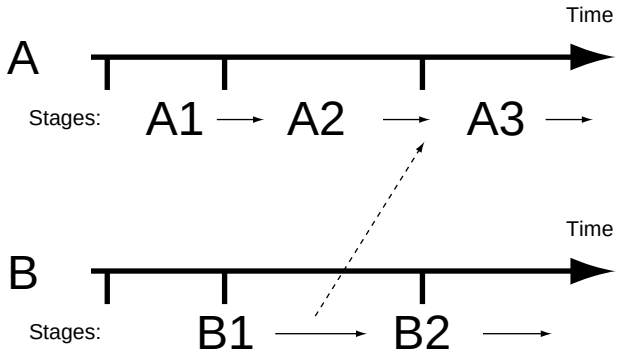


Figure 2.1 Endogenous and exogenous causes of change in a multidimensional stage theory.

> that is to say, our understanding it as occupying a place in some larger movement of economic evolution. One naturally begins, therefore, by thinking of the various ways in which men have hitherto attempted to picture to themselves the development of the nations, and thereby to comprehend it in a complete theory. They have either fastened upon the parallel between the life of a people and the life of an individual; or they have conceived of a series of stages, in which (1) pastoral life, (2) agriculture, (3) industry, and (4) trade, or (a) barter, (b) the use of currency, and (c) trade resting upon credit, have followed one another in orderly succession. These are conceptions which do, indeed, each take hold of one portion of the contents of the process of economic evolution, and for the comparison with one another of many periods and communities they are appropriate enough; but […] it is also clear that we could, with equal propriety, construct other formula, taken from the history of the population, of the settlement of the country, of the division of labour, of the formation of social classes, of the processes of production, or of the means of communication; and that each of these, so far as it went, and all of them – together with those before mentioned – would be of service for the creation of a complete theory of the development of mankind.
>
> (Schmoller, 1897, p. 1)

An example of this reasoning may be the relation of Schmoller's stages of trade with those of transport and communications technology. Schmoller jointly deals with the two topics in the first chapter of the second volume of *Grundriß*, "Transport, market and trade". Schmoller clarifies that

> the cause of any traffic and any trade is the difference of natural treasuries of the land, the diversity of men and of their needs, and the division of labor.
>
> (Schmoller, 1904, p. 4)[6]

He delineates a history of trade that has passed through three distinct stages. At the beginning of human experience society was mostly based on production for consumption ("self economy" or *Eigenwirtschaft*) organized by tribes or kinships. Within each kinship transfers of goods and services were based on reciprocity and traditional or power-based commitments. No exchange can take place due to insufficient variability of endowments and needs within the kinship. Only different tribes occasionally exchange a few goods, mostly on occasion of religious meetings. A more regular short-range trade gradually emerges with the accumulation of a surplus and the development of a more refined division of labor between industries and geographical areas. Agriculture on the one hand and urbanization on the other crucially contribute to the beginning of this second stage, in which the survival of most of the population still depends, however, upon self-production. In both the first and second stages occasional long-range trade could take place on the initiative of adventurous merchants, but although these enterprises increased steadily from the fourteenth century onwards, the third stage of long-range and international trade only begins in the nineteenth century. This late evolution was caused mainly by the absence of adequate infrastructure. While the technology for long-range navigation was already known to the Phoenicians, the Greeks and the Romans, long-distance maritime trade was too dangerous while most rivers were not adequately maintained. Long-distance terrestrial journeys were similarly possible only along the few roads built by the most powerful ancient populations. During the Middle Ages most countries faced a substantial decrease in long-distance trade. It was only after the process of national unification in various countries that state power promoted the infrastructure and legal reforms necessary for countrywide trade. The promotion of national interests then supports the subsequent development of intercontinental trade (based mainly on navigation).

On the other hand, communication and transport technology evolved through stages as well. As mentioned, navigation had already reached an advanced level of technical development centuries before Christ (the first stage). Long roads were built by the Chinese, the Arabs and the Incas, and the Romans developed a capillary mail system to sustain their administrative and military machine (the second stage). Between the 1600s and 1800s a system of smooth wooden roads was developed, connecting caves and mines to factories and allowing horses to pull heavier loads. Finally, from the nineteenth century railroads made passenger and freight transport exponentially faster and cheaper (the third stage). While the first two stages developed chiefly out of military and state policies, this later evolution was driven mainly by the profit motive. Thus, while the evolution of trade affects technological development, and conversely technology makes trade possible, each phenomenon requires variable amounts of time (and a variable number of stages) for development, as well as a number of other exogenous preconditions (for example political) to be met.

In summary, there can be no doubt that no previous thinker would have maintained that all social evolutions took place at the same pace. However, the common practice before Schmoller and his school was to analyze stages of

society inspired by the actual experience of currently "underdeveloped" extra-European populations, and to reconstruct the state of technology, policy, economy, and so on as a function of each (predefined) stage. In following this train of thought, relevant issues were acknowledged on occasion and yet frequently remained hidden in the analysis; such as Schmoller's recognition that a certain technology was there long before it came to be used on a large scale, for whatever reason.

Hence, while those who depict an overarching sequence of stages of social development – like Mill – do not deny the multidimensionality and mutual dependency of several social phenomena, Schmoller's method allows for the clearer distinction of exogenous and endogenous causes of development. Such a method, as will be shown in what follows (especially Chapter 7), allowed him to improve substantially upon classical economists' previous explanations of gender inequality.

Part II

Difference, behavior and aggregative analysis

3 Social sciences and the act of classification

From the methodological point of view, three issues are most connected to the topic of diversity: the salience of aggregative analysis, the implied theory of individual and collective behavior and the relationship between economics and the other social sciences. As explained in Chapter 1, the issue of aggregative analysis is fundamental to the treatment of diversity because it implies a researcher's choice on what differences between persons are "relevant". These relevant differences imply that the individuals objects of analysis should be investigated separately. On the contrary, differences that are assumed to affect the results of the analysis only marginally can in first approximation be left outside of it; that is the objects of analysis can be considered jointly (aggregated). In Mill's words:

> as no two individual cases are exactly alike, no *general* maxims could ever be laid down unless *some* of the circumstances of the particular case were left out of consideration.
>
> (Mill, 1844, p. 327, original italics)

Thus a genuine consideration of diversity by necessity implies some sort of aggregation of individuals for at least two reasons. First, the *ceteris paribus* clause implicit in any theoretical analysis amounts to dismissing as uniform all those differences that are not made explicit. Thus, all persons are grouped within a same class with respect to these discarded variables. Second, if by diversity we mean differences of social origin, even when considering such differences individuals will be grouped analytically since they rarely enjoy a unique status (or face a unique social environment).

If consideration for individuals' diversity necessarily implies some sort of aggregation, or at least it sometimes requires aggregation, diversity implies a partial departure from the mainstream of contemporary microeconomics, based on the near unquestionability of methodological individualism. Two connected issues arise as a consequence: what theory of behavior is compatible with a more flexible methodological approach? What is thus the implied place of economics within the social sciences, and its relation with the neighboring disciplines of sociology, anthropology, and similar? Mill's and Schmoller's answers to these

questions will be considered respectively in the next two chapters, while their position on the issue of aggregation is discussed in the present one.

Both Mill and Schmoller wrote specifically on the method and scientific process of political economy. The literature on the two authors tends to agree, albeit with a few dissenting voices (on which see Chapter 5), to reject the idea that Mill and Schmoller were, in their countries, the prime advocates respectively of a purely deductive approach to political economy (as early interpretations of Mill, 1844, suggested) and of a purely inductive approach (as implied by some interpretations of Schmoller's position in the *Methodenstreit*).[1]

Indeed, by the second half of the nineteenth century the most eminent philosophers in both countries were already in agreement that there can be no observation without an ordinate system of concepts being in the observer's mind prior to observation itself. As Mill writes in *Logic*:

> the individual facts from which we collect our inductive generalisations are scarcely ever obtained by observation alone. [...] We cannot describe a fact, without implying more than the fact. The perception is only of one individual thing; but to describe it is to affirm a connexion between it and every other thing which is either denoted or connoted by any of the terms used. [...] this identification of an object – this recognition of it as possessing certain known characteristics – has never been confounded with Induction. It is an operation which precedes all induction, and supplies it with its materials.
>
> (Mill, 1872, pp. 643–645)

Both Mill and Schmoller insisted that in the social sciences the a priori conceptual system should not be founded on purely theoretical abstractions, completely independent from experience and possibly justified by their instrumental role in developing a thoroughly self-consistent theory (as part of the contemporary mainstream seems to suggest). Rather, they held that the necessary hypotheses should in turn be based upon both previous observation and relevant theories of the past. As a consequence, scientific investigation emerges as a circular process, or rather, if we admit that there can be scientific progress, as a spiral.

Specifically concerning political economy, contrary to the view that depicts Mill as advocating an axiomatic deductive science we are able find several passages in which he expresses in unconditional terms the concept that even deduction must rest on previous observation. For example, in Mill's 1836 essay (republished with modifications in 1844) on the method of political economy:

> by the method *à posteriori* we mean that which requires, as the basis of its conclusions, not experience merely, but specific experience. By the method *à priori* we mean [...] reasoning from an assumed hypothesis. [...] The first of these methods is a method of induction, merely; the last a mixed method of induction and ratiocination.
>
> (Mill, 1844, p. 325, original italics)

However, such a position underlies Mill's whole theory of knowledge, defining his approach to philosophical positivism:

> […] the process with which Logic is conversant, the operation of ascertaining truths by means of evidence, is always, even when appearances point to a different theory of it, a process of induction.
>
> (Mill, 1872, p. 641)

As remarked upon in the second chapter, a characteristic of Mill's rhetoric is the use of the term *truths* in its plural form, by which Mill constantly stresses the idea that human knowledge can detect regularities in a certain phenomenon (either social or natural) but it certainly cannot comprehend the phenomenon in its whole complexity or in its objective reality (Hands, 2001). Science thus consists of rational reconstructions of partial laws that represent certain aspects of the phenomenon; the application of science or "art" is necessary to compose several laws and to draw operative conclusions. A peculiar inclination towards synthesizing several scientific positions as well as caution in applying science's theoretical implications to real-world issues are the two major consequences of such an epistemological position on Mill's side.

According to both Mill and Schmoller, a crucial passage of this process of theory-driven observation is the precise definition of the object(s) of analysis. That is, the choice of defining and selecting the unit(s) of analysis is a fundamental part of the process of hypothesis development in the social sciences and it consists of the classification of events or individuals into the categories of "relevant" and "not pertinent," and possibly the further parcelization of the former into a number of more specific classes.

Accordingly, towards the end of the long Introduction to his *Grundriß*, Schmoller defines three ordered steps (or tasks) of scientific enquiry (Schmoller, 1900, pp. 100–112): (1) observing phenomena; (2) defining and classifying them; (3) finding typical forms and explaining their causes. It is not by chance that Schmoller groups together the conceptualization and classification phases. As already mentioned, Mill similarly highlights that "as soon as we employ a name to connote attributes, the things […] which happen to possess those attributes, are constituted *ipso facto* a class" (Mill, 1972, p. 118, original italics).

Definition and classification are intermediate passages of scientific enquiry. They should be developed with the aim to rationalize the induction process, and in turn they constitute the subject matter (the hypotheses) of the following deductive process. As mentioned, they are also inevitable steps of enquiry since simultaneous consideration of all individuals and their peculiarities is ruled out on the basis of proving too extensive an activity, one beyond human capacity.

As mentioned, classification of individual cases implies a selection of the subject matter to be tackled by the following analysis. The methodological individualism of contemporary mainstream economics focuses on a few attributes

supposedly common to all individuals (namely their being workers, consumers and savers, all in the specific form of "exchangers" on the market), while ignoring other possible attributes that instead would necessarily lead to a grouping of individuals, as is widely recognized within radical or feminist approaches to political economy, for example. Thus from Mill's and Schmoller's perspective mainstream theory risks concealing individuals' diversity while restricting analysis to the study only of specific differences across individuals: their constraints, preferences, expectations and cognitive capabilities. Most of the time, as mentioned in Chapter 1, these forms of difference may all indeed be termed under the collective label of heterogeneity.

By contrast, it was clear to both Schmoller and Mill that the problem of reducing an unmanageable amount of information implies that the only way in which the analysis can take notice of differences amongst individuals is by focusing on specific differences while ignoring the others; that is, by classifying individuals and then proceeding by aggregate analysis. Mill and Schmoller clearly argued for and applied in their own work a mixture of methodological individualism and aggregate analysis, depending on the issue concerned. Thus, Schmoller was very explicit in stating that recognition of human agency as the engine of all social change does not imply the necessity to keep referring to it when attempting scientifically to describe society:

> The idea that economic life has ever been a process mainly dependent on individual action – an idea based on the impression that it is concerned merely with methods of satisfying individual needs – is mistaken with regard to all stages of human civilization, and in some respects it is more mistaken the further we go back.
>
> (Schmoller, 1897, p. 3)

However, analysis by aggregates does not imply a refusal to recognize that individuals and their will are the ultimate objects of study or that they act as the engine of all social movements. Moreover, the use of aggregates for the sake of analysis does not even imply the scientific, much less the political, priority of such aggregates over individuals. It is thus convenient to distinguish two methodological approaches as distinct from methodological individualism: *holism*, by which I denote the methodological position implied by defending the use of aggregates as one of several legitimate scientific methods in the social sciences; and *universalism*, introduced by Schumpeter to imply the belief that "social collectives, such as society, nation, church, and the like, are conceptually prior to their individual members; that the former are the really relevant entities with which the social sciences have to deal; that the latter are but the products of the former" (Schumpeter, 1954, p. 85).[2]

Both Mill's and Schmoller's analyses are informed by the former concept – holism – though some passages of the Schmoller's works occasionally give rise to interpretations in favor of universalism. For example, as observed in Chapter 2, Schmoller consistently argued for an ethical – even before an economic –

positive re-evaluation of states' aggressive trade policies under mercantilism, on account that it favored the emergence of strong central authorities and a sense of national unity. However, it is also clear that to Schmoller these results are but the intermediate means to secure a better standard of living for the largest strata of the population; that is, of each citizen taken individually, whose welfare is the ultimate goal of policy and the final standard of moral judgment.

While there is no superiority in both authors' thinking from a methodological point of view, a conceptual coherence must exist between the theory of aggregate behavior and that of individual behavior. Indeed, they implied that it should always be abstractly possible to represent, or at least theoretically to treat the former by means of the latter, although this process is in general unnecessary.[3] Such a position implies microanalyses as a complementary tool, or even as the most effective tool, depending on the specific issue that is the object of study each time.

In fact, the use of aggregates for the sake of analysis does not necessarily even imply their actual existence. From this point of view the problem of classification bears some resemblance (and indeed it partially overlaps) with the scholastic debate on "Universals" or general names (on which see Schumpeter, 1954, pp. 84–86; Roncaglia, 2005, pp. 31–34). As it is well known, the debate occupied most European intellectuals between the eleventh and the thirteenth/fourteenth centuries and concerned the issue of whether the general concepts we use to denote a group of items (for example "cake" to indicate all cakes) actually exist. Positions differed down to the smallest detail, but on the whole we may distinguish two opposing schools: the "realists", who believed that universals do exist, and in the extreme that they exist autonomously and independently of the units composing them (for example, in the mind of God); and the "nominalists," who believed universals to be a construction of our own, in the extreme that they are an arbitrary grouping of disconnected units that have nothing in common, a mere *flatus vocis* (sound of voice) as Roscelin of Compiègne is said to have put it. The debate was substantially settled by Pierre Abélard, who established a consensus (later authoritatively backed by Thomas Aquinas) stating that universals express a commonality among things that actually exists in some characteristics of the things themselves, but that universals do not embody the existence of any of these units, each of which retains its unique and autonomous existence. For example, "cake" summarizes the many commonalities among all cakes, which exist because they are embodied in each cake, but no cake perfectly matches our theoretical idea of "cakeness".

The problem of classification with which we are concerned here is different from that of universals because it does not relate to the fields of metaphysics or ontology, but rather epistemology. That is, the legitimacy of the use of collective entities within scientific analysis is an issue partly unrelated to that of their objective existence. For example, aggregates may simply be analytical devices to talk about reality without them being real (as, for example, Max Weber's *idealtypen*). Or, to paraphrase Abélard, we may legitimately talk about the middle class even in a world where it did not exist (any more).

However, the second issue, of the actual existence of aggregates, is not irrelevant for political economy. Having attested that both Schmoller and Mill considered their use as legitimate and indeed sensible, their opinions differed to a certain extent concerning this second point, as illustrated in the next two paragraphs.

J.S. Mill and the consistency argument

As implied by the citation in the previous paragraph, Mill's position in *Logic* is that general names refer to the common attributes of single individuals. They do not refer to the collective of individuals, which he conceives to exist only individually. Still, the question remains as to whether these common attributes actually exist, as opposed to their being a creation of the scientist. On this point, Mill believes that some classifications are in fact inspired by reality as it straightforwardly appears to everyone; in a sense they exist independently of the specific observer. Other classifications, instead, are but useful analytical tools specifically developed by the single observer with the aim of using them to produce a scientific theory – words used to economize language but reflecting no objective reality.

To Mill, both procedures of classification are scientifically admissible, "the only peculiarity of the [former] case is, that the convenience of classification was here the primary motive for introducing the names; while in other [latter] cases the name is introduced as a means of predication" (Mill, 1872, p. 119).

In the case of political economy, a convenient example is that of social class. These groupings may be the most diffused scientific classification of individuals and, as Schumpeter noted, by the time of the British classicals they may have appeared as a self-evident grouping of individuals even to the layman (Schumpeter, 1954, pp. 554–559). In a sense, they existed in society (though not physically) independent of economic science. However, if classes are recognized as (also) categories of the latter kind, that is as ad hoc categories constructed by the scientist, then:

1 an individual can belong to more than one social class (as it is the case, for example, of "Small Peasant Proprietors", with which a whole chapter of *Principles* is concerned), so that classes overlap;
2 a classification of social classes is related but separate from other classifications (for example, those based on ethnicity or nationality), so that classifications of individuals are multidimensional.

Hence, independent of the problem of the existence of collective entities, from the epistemological point of view individuals and social classes can be the objects of separate analyses, being as there is no biunivocal relationship between the two.

The instrumentality of classifications is a feature of both kinds of aggregation – that inspired by observation and that driven by the necessities of the subsequent deductive analysis:

> classification of objects should follow those of their properties which indicate not only the most numerous, but also the most important peculiarities. What is here meant by importance? It has reference to the end in view; and the same objects, therefore, may admit with propriety of several different classifications.
>
> (Mill, 1872, p. 716)

While recognizing the two kinds of classification, there is in Mill's works a certain more frequent inclination to consider the second, ad hoc kind. This approach is coherent with Mill's recurrent emphasis on the partiality of our knowledge and of any analysis of phenomena (referred to above). This tendency is perhaps even amplified in his economic works, due to his methodological position of stressing the nature of political economy as a mainly deductive science. The example of the study of social classes is again useful here, since it allows us to highlight how Mill's analyses, and in turn his different categorizations, were often instrumental to his political reformist aims (Corsi, 1984).

In *Principles* Mill identifies two distinct and independent taxonomies of social class. An economic one (distinguishing rentiers, capitalists and workers), defined after the tradition of the British classicals on the basis of the classes' contribution to the productive activity and consequently on the nature of their claim on a share of income. The other definition of class is basically expressed in terms of the political language common after the experience of the French Revolution, of utopian socialism and of Radicalism and Chartism in England. Thus we find the term "aristocracy", meaning any social group that defends and perpetuates privilege-based social institutions, in contrast with the interests of the "majority". Indeed, in many cases the very existence of objective interests of the former class prevents the possibility of referring to the opposing interests as "general" or collective. Opposite to the aristocracy we find "workers and the middle class": according to Mill, since they are entitled to greater political representation than was accessible to them at the time, they share common immediate political goals. Thus they constitute a single class, within which it is impossible to draw dividing lines when proposals of policy reform are discussed. Indeed, as a pragmatic stance makes it necessary to acknowledge that there will always be a class of powerful conservatives, partition of the progressive classes would prove counterproductive, an opinion reinforced by Mill's strong opposition to violent revolutionary developments. In this scheme, while economic definitions tend to underline separate and contrasting interests between the classes, the political terminology adopted by Mill suggests their unity, homogeneity, and conciliation within a democratic and parliamentary regime project.

However, in general the scientist is not absolutely free to define and classify at will. Rather, classification is a necessary step to define the subsequent hypotheses of the deductive part of the scientific process.[4] In the light of Mill's positivist tenet, that no universal truth can be summarized within a single all-encompassing deductive model, the ultimate aim of theory is self-consistency:

> in any tolerably advanced science there is properly no such thing as an exception. […] There are not a *law* and an *exception* to that law […] there are two laws.
>
> (Mill, 1872, p. 337, original italics)

Hence, while exogenous or random deviations from a norm (heterogeneity) are acceptable for science, systematic violations are not. So the need to construct a new class of items, subject to a different norm (that is the need to introduce diversity), emerges any time systematic violations of a scientific law are found. This requirement implies that with the aim of formulating a certain law to synthesize an empirical regularity, the collection of units of analysis should be partitioned into as many classes as are needed to prevent the emergence of a violation of the law:

> […] the very phenomenon or set of phenomena in question must be chosen as the groundwork of the classification.
>
> The requisites of a classification intended to facilitate the study of a particular phenomenon, are, first, to bring into one class of Kinds of things which exhibit that phenomenon, in whatever variety of forms or degrees; and secondly, to arrange those Kinds in series according to the degree in which they exhibit it […]
>
> (Ibid., pp. 726–727)

(Notice that Mill's definition of "series of Kinds" plays here an analytical role similar to the contemporary concept of heterogeneity). From this perspective, if methodological individualism implies the definition of a law that supposedly applies to each single unit, it does not correspond to a classless analysis, but to an analysis at the maximum possible level of aggregation; that is, of a single class.

For example, in the Part IV it will be shown that in analyzing the labor market the distinction between men and women is not a second-order approximation only useful for the specialist or to highlight certain policy implications, but that it is a necessary distinction in order to prevent the emergence of systematic violations of a number of empirical laws.

Mill's emphasis on analytical rigor and self-consistency does not contradict his constant attention to practical applications and policy implications. It only reflects the aforementioned theoretical distinction in Mill's philosophy of science between science and art (the application of science). Ultimately, the distinction between art and science is again motivated by self-consistency and rigor: in *Logic*, Mill notes that any science has applications but any art requires the conjoint application of many sciences:

> the didactic writer will naturally combine in his exposition, with the truths of the pure science, as many of the practical modifications as will, in his estimation, be most conducive to the usefulness of his work.
>
> (Ibid., p. 323)

Thus it would be an incorrect classification to include a problem of economic policy within the science of political economy, because it is implausible that economic policy does not require the contribution of sociological, anthropological or other disciplines: "the mere political economist, he who has studied no science but Political Economy, if he attempts to apply his science to practice, will fail" (ibid., p. 331).

Indeed, *Principles* includes both fields (art and science) of political economy. Mill writes in his *Autobiography* that *Principles*

> was, from the first, continually cited and referred to as an authority, because it was not a book merely of abstract science, but also of application, and treated Political Economy not as a thing in itself, but as a fragment of a greater whole; a branch of Social Philosophy, so interlinked with all the other branches, that its conclusions, even in its own peculiar province, are only true conditionally.
>
> (Mill, 1873, p. 243)

G. Schmoller and the realist argument

Before *Grundriß* Schmoller devoted most of his academic life to the writing of historical monographs, and he writes in the Preface to the first volume that he embarked upon writing his main theoretical work as a result of pressure from his publisher, who even threatened that he would find another author in his place. Indeed, unlike the American Economic Association or the Royal Economic Society, the Verein für Sozialpolitik, which Schmoller helped to found and continued to influence throughout his life, was structured as an organized group research project within which specific commissions were created to investigate specific subjects using a historical method. Thus, there is a general presumption of an inclination on Schmoller's part towards the other end of the methodological spectrum from Mill; that is, towards the use of classifications suggested by experience and direct observation, as opposed to ad hoc classifications. Indeed, while the latter instrumental form of categorization is present in *Grundriß*, the theory of scientific process laid down by Schmoller for the sake of the creation of his "concrete" or realistic (*anschaulich*) theory gives priority to the task of "observing well" over that of "defining and classifying".

Schmoller explicitly deals with this issue in the long Introduction to the *Grundriß*, in his account of the major economic doctrines up to his time. He praises J.S. Mill for recognizing that:

1. the culture of labor, upon which a large part of his theory is founded, is time and country specific, namely it is typical of the Anglo-Saxon tradition (Schmoller, 1900, p. 157);
2. his results cannot be extended to the French or German population unconditionally;

3 political economy should draw its (sociological and behavioral) assumptions from ethology;[5] that is, from empirical analysis (ibid., p. 141).

On the other hand, Schmoller criticizes Mill for not following these considerations consistently, and specifically because Mill wrote of political economy as a "science of hypotheses" leading to universal – though only abstract and hypothetical – results. Mill's presentation of the subject is indeed prone to such criticism, especially in the early *Essays on Some Unsettled Questions on Political Economy*, with such passages as the following (which, interestingly, underlines the role of classification in determining this abstract character):

> the conclusions of Political Economy […] like those of geometry, are only true, as the common phrase is, *in the abstract*; that is, they are only true under certain suppositions, in which none but general causes – causes common to the *whole class* of cases under consideration – are taken into account.
>
> (Mill, 1844, p. 326, original italics)

However, the actual economic practice of the two authors is much closer than that Schmoller advocated, and the disagreement is largely located in the different use of the term "political economy". Mill usually uses this to refer to the science of political economy; that is, excluding the art or application of it. By Mill's very definition of science as distinct from art, political economy is thus not concerned with the analysis of any actual social issue, reserved for the "art" of government.

Schmoller did not consider this distinction, possibly because it is made explicit in *Logic* and not in the short 1844 essay specifically devoted to the method of political economy. However, he would probably have objected to such a distinction as it implies a greater separation of the social sciences than the one he proposed. As he had already highlighted in the midst of the *Methodenstreit*, what he objected to was:

1 the definition of abstract hypotheses, isolating a fragment of reality;
2 the formulation of theories as universally valid, neglecting the evolutionary nature of society.

The first objection is based on Schmoller's claim that a partial view would hamper the proper comprehension of individual and social reality, which can only be understood in their manifold fullness. Terminology may be indicative here, with Mill's "partial truths" being paraphrased by Schmoller as "hypothetical causes" (*hypothetische Ursache*) (Schmoller, 1900, p. 33). In light of Mill's distinction between science and art, the main point of dissent between the two concerns the theoretical step of developing a consistent synthesis not only of the several partial empirical regularities (the economic laws), but of the results drawn from all the social sciences. As discussed in the previous paragraph, Mill

places this process in the field of the application of science, or the art of policy. That is, he mainly considers the issue a matter of practice and experience, in which a certain theoretical eclecticism should be conjoined with practical sense. By contrast, Schmoller holds that theoretical analysis cannot dispense itself from the knowledge of the state of advancement of the other disciplines, and most notably it cannot lose sight of the general aim of mutual consistency among the social sciences.

This theoretical requirement is related to the second objection reported above, and it reflects the aim of realism upon which Schmoller's theory is premised. The demand for realism on Schmoller's side evidently includes realism specifically in the analytical step of aggregation and classification. Not only in the straightforward negative sense, that the instrumental nature of classifications cannot be stretched to the point of developing implausible social groupings. In Schmoller's thinking the consideration for social aggregates may be a realistic form of analysis in a positive sense, for two reasons. First, human beings are capable of consciousness and self-consciousness. In the wake of the German idealistic tradition, it is clear that individuals' self-consciousness extends to a collective consciousness, thus granting real – though not physical – existence to aggregates such as the family, classes, countries.

However, this does not imply that science should start out from these aggregates without ever considering their derivation from individuals' consciousness:

> There is not, as however the Historical School maintained, an objective popular spirit independent of individuals, overarching them and mystically reigning upon them; just as there is not a superior general will, as Rousseau dreamt about. There is in every people a series of spheres of consciousness, coordinated, each determining the other, tending to a certain unity. […] Such an Objective Spirit […] does not live out of the individuals, but within the individuals, as each individual with a smaller or greater part of his or her self is part of some or many circles of the Objective Spirit.
>
> (Ibid., p. 16)[6]

While studying these spheres of consciousness (*Bewusstseinkreise*) is not the only task of the social sciences, it is one they cannot dismiss: "[…] today we admit that in order to understand the spiritual life of populations it is always convenient to start from the aggregate study of individuals' psyche" (ibid., p. 15).[7] Indeed, this ability of self-consciousness allows the researcher fundamentally to understand the reasons for human behavior, thus allowing for a deeper comprehension of reality in the social sciences. As Dilthey puts it, "we *explain* the phenomena of nature, we *understand* the phenomena of the mind (or of culture)" (cited by Schumpeter, 1954, p. 777n, original italics).

The second reason that analytical aggregates may reflect social reality is collective behavior. Schmoller frequently notes that many human activities are undertaken not by single individuals but by a group that, with respect to that activity, can therefore be considered a coherent whole. First there is public and

political action, by which a collective will emerges out of hierarchy or bargaining. Second, there are the economic activities of production and consumption. These concern groups of people increasingly, the more technology fails to allow for individual provision for all our needs, and the more we look back in history:

> The most primitive tribe of hunters or shepherds maintains its existence only by means of an organization based on kinship, wherein union for purposes of defense, joint journeyings to summer and winter pastures, communistic acquisition for the benefit of the whole tribe, communistic guidance by the tribal prince play the most important parts. The first settlement and occupation of the soil is never a matter for individuals, but for tribes and clans.
>
> (Schmoller, 1897, p. 3)

More generally, Schmoller's theory of the emergence of social institutions is a relevant example of collective action. According to Schmoller's evolutionary view of social development, institutions are usually the result of established traditions or customary behavior:

> from the above-mentioned psychic relations, from custom, from law and morals, from contacts [between persons], attractions and repulsions that take place every day, from contracts and reciprocal adaptation emerge lasting forms of social life.
>
> (Schmoller, 1900, p. 61)[8]

Social institutions can be organizations, laws, social norms or any other sphere of society affecting individuals' behavior. Schmoller's definition is indeed very general: "by political, juridical, economic *Institution*, we mean a partial ordering of social life, destined at specific purposes and reaching [a state of] autonomous development" (ibid., p. 61, original italics).[9]

They develop autonomously, implying that they exist independently of the single individuals; and they are thus liable to separate (aggregate) enquiry. However, institutions exhibit a further characteristic that Schmoller describes with a definition in parallel to the previous one; that is, they physically exist as forms of social life, embodied by the persons who take part in them. Schmoller defines these "social organs" (*Sociale Körper*): "[…] by emergence of an *Organ* we mean the personal side of the institution: for instance, marriage is the institution, the family is the organ" (ibid., p. 61).[10] Hutter (1994) points out that the term is significant, as in German economic thought "organ" recalls a social science tradition of using natural metaphors based on biology rather than physics (as others, like Jevons, did). Thus, "organ" hints at the properties of unity and autonomous development within a larger overarching and developing body.

Hence, an analysis of social life, starting with observation, proceeding though classification and finally reaching aggregative analysis, is a consequence of Schmoller's aim to build a realistic (*anschaulich*) theory. However, Schmoller's position on the real existence and the autonomous development of collective

entities does not imply that they can (let alone that they should) be understood to possess human characteristics, namely unitary agency, purposes or will. Criticism of Rousseau's "general will" applies to class will as well, and Schmoller's objective Spirit remains the sum total of individuals' many spheres of collective consciousnesses – the consciousness of belonging to a class, a gender, and so on – that resides in the single individual. Truly, according to Schmoller, the Spirit of a society is open to autonomous analysis and undergoes autonomous development, partially independent from the single individual components of it, but this is only "[…] because of the complicated ways in which social structure (in all its forms) and human agency depend on, but remain irreducible to, each other" (Lawson, 2003).

Finally, as with Mill, in Schmoller's work there is an evident political aim effectively aided by his methodology. Indeed, having defined the tasks of the social sciences (as summarized above), at the end of the Introduction to *Grundriß* Schmoller defines the specific aims of the *anschaulich* (realistic) political economy he tried to build (Schmoller, 1900, pp. 187–188):

1 considering evolution as a dominant scientific idea of contemporary science;
2 taking moral and psychological consideration:
    a of instincts and feelings;
    b of the economy as a social phenomenon, influenced by morals and law, institutions and social organizations;
    c of analyzing the economic activities in connection to the state, religion and morality;
3 criticizing the political individualism of natural law, as well as socialism.

Emerging from the third point, which is implicitly based on his conservative political views, Schmoller's use of collective (often national) entities is instrumental to highlight his assumption of the existence of a whole country's interests, or a nation's general good. Thus, a comparison of the two authors shows that it is equally possible to opt for methodological and political holism jointly as in Schmoller's case, or to distinguish several social classes by means of methodological holism, though with the aim to highlight distributive conflicts that are evaluated in terms of political individualism, as in Mill's case. However, neither Schmoller nor Mill let his political aims determine the content, or the method, of his analysis. The compatibility of similar methodologies with such different political ideologies is an instance of the neutrality of the use of classification and of the subsequent aggregate analyses with respect to their political implications.

This observation was no surprise to Mill and Schmoller. They both considered aggregation as a necessary analytical step, that had to be employed by scientists independent of their political aims. As discussed, Mill deemed this procedure necessary on the grounds of a practical impossibility to handle all interpersonal differences simultaneously, coupled with the opportunity to consider each time at least some of these differences (thus not aggregating everyone

into a single "macroeconomic" class, though homogenizing individuals with respect to all the differences not explicitly considered). Schmoller employed this procedure in order to represent society in a way that is closer to reality, in the face of widespread instances of collective behavior (providing physical reality to aggregates) and of individuals' collective consciousness(es) (giving them substance in the mind of the agents). Evidently, neither Schmoller nor Mill considered aggregation as the only legitimate method of social analysis, leaving the issue of the most adequate level of analysis to be decided as a function of the topic to be analyzed each time.

4 Individual and aggregate behavior

From the analysis of Mill and Schmoller's positions it becomes apparent that both deemed methodological reductionism (in the sense of an exclusive reliance on individualism or holism) as inadequate either for epistemological or ontological reasons, and both believed that economic method should be tailored to the issues in question. By rejecting methodological universalism, both writers conceived of individuals as the only agents of social change and yet they frequently employed aggregate analysis. Thus, it seems necessary to investigate their theories of behavior, and in particular how they were able to conciliate notions of individual and aggregate behavior.

The analysis provides further arguments for the authors' refusal either to reduce individuals' behavior to a personified single collective entity, or to represent individuals as living in a *vacuum* with no external influences upon their will. As it turns out, the analyses of behavior by the two authors can be considered as complementary. From a contemporary perspective, the suggestion is to adopt a flexible approach, alternatively relying on the analysis of individuals' motives or on aggregative categories, depending upon analytical necessity.

In accordance with his own treatment of the subject, Mill's thought will be exposed in the form of a critique of Bentham. Mill's criticisms in some passages are perhaps too vigorous and are more easily applicable to the extreme interpretations of his system than to Bentham's actual works. Indeed, as is widely known Bentham was a lively polemicist and tended to express himself in sarcastic and often unconditional terms (for example, on the Women's Question and sexual freedom, see Cot and Pellé, 2010). He assumed that behavior can be directed by modifying incentives and constraints because he was dealing specifically with the criticism of contemporaneous traditional English law, and his main aim was to put forward a comprehensive reform of penal law. In this context, incentives and constraints are almost the only tools available to the legislator. Moreover, as Danchev (2010) notes, psychological hedonism in Bentham is apparent only in a "weak form": pleasure motivates behavior, but people are not necessarily capable of pleasure maximization. As Maas (2005) recounts, it was Jevons who later presented his own thoughts on such hedonism as an extension and refinement of Bentham's. In contrast, J.S. Mill – at the time unanimously considered the more authentic interpreter of utilitarianism and Benthamism – rejected Jevons' reinterpretation forcefully.

I will focus here on works mostly written before Jevons' *Principles of Political Economy*, in order to highlight Mill's production during the phase when he was trying to develop a workable (though partly implicit) model of behavior upon which to base subsequent economic analysis. In his later life, Mill delegated the research on the topic to his friend and follower Alexander Bain who, benefiting from Mill's suggestions and comments, in 1855 published *The Senses and the Intellect*, followed in 1859 by *The Emotions and the Will*. Bain's works attempted to lay the foundations of ethology, the "science of national character" envisaged by Mill to complement political economy with the specific aim of explaining individual behavior and social development. In Mill's vision, psychology should study the mechanism by which our mental abilities function, ethology should inductively study the development of individuals' and nations' character, and political economy should only be concerned with the implications of these characteristics in determining social phenomena (see Chapter 5).

However, Mill's original presentation of the subject in an overcritical form against some extremist readings of Bentham's work (namely, readings along the lines that Jevons would develop later) is interesting to the contemporary reader because of the number of objections raised by Mill that, by way of analogy, apply to some modern extensive uses of the subjective utility theory (SUT). Hence, this section of argument proves relevant indirectly to clarify the methodological approach underlying the applied analysis presented in Chapters 12 and 13.

The following exposition of Schmoller's treatment of individual and aggregate behavior highlights the multidimensionality of both, underlining the interrelatedness of the social sciences in Schmoller's view. There are many similarities between Schmoller's account and the model that I will develop on the basis of Mill's work. Schmoller's treatment emerges as being more concretely based on lists of specific factors that played a role historically, as opposed to Mill's more abstract and general reasoning (that is, where one talked about the role of religion in Europe the other described Christianity). Due to its historical nature, Schmoller's treatment is also more open to an evolutionary (dynamic) view. As mentioned, Mill assumed that behavior is a hypothesis for political economy; hence it is a static element of the analysis whose development is not denied, but left for the study of other disciplines (psychology and ethology). By contrast, Schmoller's holistic approach calls for a multidisciplinary explanation of social movements within the same historical analysis, recognizing that individual and aggregate dynamics take place simultaneously.

Mill's criticism of Bentham

Mill wrote no comprehensive essay on psychology, though he frequently referred to the subject as a building block of any theory of human society. He affirmed, for example, that "for the philosophy of matter, the materials are the properties of matter; for the moral and political philosophy, the properties of man, and of man's position in the world." (Mill, 1838, p. 89), or "the groundwork of all other

philosophy must be laid in the philosophy of the mind" (Mill, 1840, p. 121). Rather, he usually referred to his father's 1829 *An Analysis of the Phenomena of the Human Mind* (Mill, J. 1878), which he claimed to embrace fully.

However, a complete description of his own position can be inferred from frequent reference to related matters. A convenient starting point for an exposition of Mill's theory is that of his many criticisms of Bentham's theory of behavior. Mill summarizes Bentham's theory in a concisely:

> Man is conceived by Bentham as a being susceptible of pleasures and pains, and governed in all his conduct partly by the different modifications of self-interest […], partly by sympathies, or occasionally antipathies, towards other beings. And here Bentham's conception of human nature stops.
>
> (Mill, 1838, p. 94)

With his customary attention to the precise definition of concepts as a necessary preliminary step of the analysis, Mill is usually careful to respect the correct utilitarian terminology whereby the term to define individual pleasure or absence of individual pain is *self-interest*, whereas *utility* is intended to mean the greatest happiness of the greatest number. That is, self-interest is multidimensional in light of the many forms of pleasures and pains, but utility has even more dimensions because it refers to the maximum of all the pleasures of all the subjects.

Although clearly similar in many respects, Bentham's theory of self-interest is different from the later subjective utility theory (SUT) – in a sense well beyond mere terminology. In fact, in his defense of utilitarianism – even in the Benthamite form – Mill strongly criticizes the "perverted use" of the word *self-interest* "in its grossest form" as meaning the seeking of immediate – often physical – enjoyment: "Yet the common herd, including the herd of writers, not only in newspapers and periodicals, but in books of weight and pretension, are perpetually falling into this shallow mistake" (Mill, 1861b, p. 209). This vulgarization of self-interest is prone to two criticisms based on Bentham's theory, in addition to the criticisms that Mill had of Bentham.

First, as mentioned, self-interest, happiness, pleasure and pain are defined by Bentham as multidimensional phenomena – that is, there are many possible forms and sources of such feelings. Of the different *forms* of pleasure that happiness is composed of (intellectual pleasure, bodily pleasure, spiritual pleasure, etc.), many are held by Mill as being simply incommensurable and therefore not susceptible to being reduced to a one-dimensional variable (least of all a quantitative variable): "neither pleasures nor pains are homogeneous, and pain is always heterogeneous with pleasure" (ibid., p. 213). Mill uses the example of ancient Greek tragedy to claim that choice may sometimes be painful or impossible in itself (for example, the choice between the hero's family and his country). Interestingly, Mill considers a sort of "revealed preference approach" to pleasure maximization *à la* Samuelson (ibid., p. 211) but he limits the applicability of such a method to comparable pleasures that are different only in quantity. Three factors prevent its complete suitability: people need to have had actual experience of all the options

in order to be able to choose correctly; they must not opt for merely "satisfactory", suboptimal options (as they frequently do, possibly out of temptation);[1] the alternatives have to be comparable – that is, the implied pleasures must be substitutable – or otherwise choice is uninformative of preferences.

Second, many options are deemed to be incomparable even within the same form of pleasure (for example, different sources of the kind of pleasure arising from pride or the kind of pain arising from shame). Using modern terminology, while the former point concerned the possibility of comparing different feelings of pleasure and pain, thus leading to many utility functions for each individual, or rather a multidimensional one, the present one concerns the comparability of the arguments of a same dimension of the subjective utility function. On this point, although Menger's treatment is specifically focused on consumption, Mill's general considerations appear partly similar to the former's lexicographic approach to SUT:

> It is quite compatible with the principle of utility to recognise the fact, that some *kinds* of pleasure are more desirable and more valuable than others. It would be absurd that while, in estimating all other things, quality is considered as well as quantity, the estimation of pleasures should be supposed to depend on quantity alone.
>
> (Ibid., p. 211, original italics)

Mill defends Bentham from the previously mentioned grossly vulgar interpretations of his thought which identify happiness with a "continuity of highly pleasurable excitement" (ibid., p. 215), but he also criticizes Bentham for indeed being prone to such misinterpretations.

According to Mill, two interpretations can be applied to Bentham's broad hypothesis that all behavior is ruled by the avoidance of pain and the search for pleasure. To understand this point, let us define in accordance with Mill's terminology *will*, the source of individual action ("the active phenomenon"), as distinct from *desire* ("the state of passive sensibility"); that is, the motive behind will. Such a distinction dates back to the debate on "interests and passions" (on which, see below) concerning the role of passions as opposed to "rationality", conceived of in a variable and loose sense. A crucial link with the theory of individual behavior as it evolved in Britain after such debate is Hume's *Treatise of Human Nature* (Diaye and Lapidus, 2005), in which – grossly simplifying – Hume develops the view that decisions (Mill's *will*) are the consequence of a modification of one's passions (Mill's *desire*).

If we adopt this terminology (without necessarily adhering to Hume's specific theory), Bentham's theory of behavior could be alternatively interpreted as:

1 assuming simultaneously two hypotheses: that (1a) all desires are directed towards increasing one's pleasure or decreasing one's pain, and that (1b) this is the only source of will ("spring of action" in Bentham's terminology). Or
2 simply stating that all action is the result of Will, which amounts to a tautology given the previous definition of Will.

As shown in Figure 4.1, I shall term these interpretations *deductive utility theory* (DUT) and *renaming utility theory* (RUT) respectively.

Mill attributes both meanings of the term "self-interest" to Bentham's use of it, stating that his works could imply either of the two in different passages. Coherent with his positivist approach, Mill does not consider Bentham's position as intimately false, but rather as a half-truth produced by a "systematic half-thinker:"

> For our own part, we have a large tolerance for one-eyed men, provided their one eye is a penetrating one […] no whole truth is possible but by combining the points of view of all the fractional truths, nor, therefore, until it has been fully seen what each fractional truth can do by itself.
>
> (Mill, 1838, p. 94)

Concerning RUT, Mill recognizes that affirming that anything that is done is done because the individual wanted it so amounts to a simple renaming of any behavior as interest: "Mr. Bentham did no more than dress up the very trivial proposition that all persons do what they feel themselves most disposed to do" (Mill, 1833, p. 14).

However, he also notices that employing in scientific discourse a term drawn from the common language but with a different and overlapping meaning is not a theoretically neutral procedure: usage would induce scientists to indulge frequently in the common meaning of the term. In the specific case, the risk is to be led to consider any behavior as "purely self-regarding interest", that is (1) rational and (2) selfish. This amounts to a descriptively untenable hypothesis, at times discarded by Bentham himself:

> But under cover of the obscurer phrase a meaning creeps in, both to the author's mind and to the reader's, which goes much farther, and is entirely false: that all our acts are determined by pains and pleasures in prospect, pains and pleasures to which we look forward as the consequences of our acts. This, as a universal truth, can in no way be maintained.
>
> (Mill, 1833, p. 12, original italics)

(Notice the similarity of the position attributed by Mill to Bentham with the intuition behind the anticipated regret–rejoice subjective utility model proposed by Loomes and Sugden, 1982). Mill attributes a crucial role to naming and precise definition in science – that of a preliminary step for any subsequent reasoning: "To define, is to select from among all the properties of a thing, those



Figure 4.1 Two interpretations of Bentham's theory of self-interest.

which shall be understood to be designated and declared by its name" (Mill, 1872, p. 3). He dedicates the first three chapters of *Logic* to the issue, because he deems confusion as to what the object of analysis really is to be a major source of scientific error. Within the social sciences this careful attention to precise definitions is reinforced by Mill's desire to establish a near unanimous conceptual common ground upon which subsequent discussion can be fruitfully based (as, for example, with Mill's essay entirely dedicated to the issue of what should be meant by productive and unproductive labor, in Mill, 1844). Indeed, Mill's adherence to associationist psychology may be a further reason for his careful – possibly pedantic – devotion to explicit and clear definitions (a disposition, however, which he shares with Schmoller, as noted in Chapter 2):

> […] we ought further, when we are restricted to the employment of old words, to endeavour as far as possible that it shall not be necessary to struggle against the old associations with those words. We should, if possible, give the words such a meaning, that the propositions in which people are accustomed to use them, shall as far as possible still be true; and that the feelings habitually excited by them, shall be such as the things to which we mean to appropriate them ought to excite.
>
> (Mill, 1844, p. 283)

Thus, Bentham's RUT approach should be regarded as unscientific due to its extreme liability to misunderstandings, violating the crucial role that Mill attributes to the clarity and correct definition of the concepts upon which the analysis is founded.

Concerning DUT, Mill criticizes both the aforementioned hypotheses. With respect to the first hypothesis (1.a), that behavior is systematically and coherently driven by self-interest, we must again note that Bentham's definition of self-interest is coherent with altruistic behavior in so far as philanthropy generates any pleasure for the altruist. Instead, it is incompatible with any "pure" concern for the others' well-being, which would produce no direct pleasure to the agent; for example, sympathy in Smith's sense.[2]

Mill raises two connected objections to the hypothesis of an exclusively interest-driven behavior. First, he deems it patently partial and possibly misleading, to the extent that interest is not even the main determinant of behavior:

> It would be more correct to say that conduct is *sometimes* determined by an *interest*, that is, by a deliberate and conscious aim; and sometimes by an *impulse*, that is, by a feeling […] which has no ulterior end, the act or forbearance becoming an end in itself.
>
> (Mill, 1833, p. 13, original italics)

It is worth noting that Mill proposes a distinction between passions and interests that is partially different from the previous, century-long debate on moral philosophy (summarized by Hirschman, 1977). Consistent with Bentham's extensive

and pluralistic definition of self-interest, to Mill it is not the extrinsic rationality of an act to determine its classification as interested (for example, profit maximization) as opposed to passional (for example, revenge). Rather, any behavior is considered as self-interested if it is instrumental to some other conscious aim; that is, any aim is necessarily a passion.

Here it is likely that Mill's early education in the Classics, and in particular the Greek philosophers, may have played a role in clarifying that the enjoyment of the crudest immediate pleasures cannot be an all-encompassing aim per se, unless we are ready to accept that all action is ultimately driven by such passions. Following a tradition dating back at least to Aristotle, Mill requires that we consider the many forms of pleasures not only as qualitatively different, but as hierarchically ordered – both in a moral and in a hedonistic sense. Let us break up Mill's argument by considering the consequence of the existence of a plurality of pleasures in this section, and the relevance of their ordering in the next one.

Recognition of a plurality of passions is Mill's second argument against Bentham's hypothesis 1.a, that all desires are consistently directed towards seeking pleasure and avoiding pain. If passions are diverse, in order for Bentham's theory to be of any use he must assume the existence in any situation of a preponderant interest, or of a coherent balance of motives leading to a clear-cut preference. According to Mill such an hypothesis is untenable because it ignores "the existence of conflicting considerations, which all doctrines do [recognize], that have been believed by sane persons" (Mill, 1861b, p. 225).[3] As mentioned, such inner conflict of interests and of opposing feelings may in fact lead to the impossibility of choosing or at least to evaluating the best option rationally.

In the end Bentham developed a theory of behavior already dissatisfactory with respect to the standard of his time. So long as a distinction was finally drawn between pious behavior – relevant to religious judgment – and the other spheres of human life, authors were increasingly ready to recognize a multiplicity of passions and interests that constitute desire. Mill himself enumerates at least pride, honor, a sense of personal dignity, self-respect, the love of beauty, the love of order and the love of power or action for their own sake (Mill, 1838, p. 94 ff.). All these passions cannot simply be reduced to pleasure and pain, as they are sometimes pursued in opposition to self-interest (when rationally evaluated). On the other hand, if we are to label all these passions as sources of pleasure (that is, as forms of self-interest) then we fall back to RUT.

Mill also rejects the second hypothesis of DUT (1.b), stating that no other sources of will exist, apart from individuals' desire. This is most evident when he moves from criticism to positive descriptions of behavior.

Remarks on Bentham's Philosophy and *Bentham* were aimed mainly at proposing a wider view of utilitarianism in the field of ethics than Bentham's (while defending his radical political positions), and at proposing Mill's pragmatic method of recognizing and synthesizing "half-truths".[4] Hence, both essays stress the importance of not dismissing Bentham's theory *tout court*, particularly because of its positive contribution to policy evaluation. According to Mill, as discussed above, "motives are innumerable" and the very attempt to enumerate

them is "in its very conception an error" (Mill, 1833, p. 13). However, the scientist can fruitfully seek out those interests, desires and aversions most likely affected by a certain policy or institution under scrutiny. This would enable the attempt to predict individuals' reaction to a change in such policy, based on the *ceteris paribus* hypothesis that only the rational pursuit of self-interest is relevant, because the other motives of action are unchanged in the new situation. Indeed, Bentham himself did not attempt to provide a coherent theory of behavior but only to define an instrument through which to evaluate alternative proposals of legislative reforms, and in this light Mill strongly favors his contribution. To a certain extent, although pleasure is not the only aim of action, it can be considered as the leading motive within the economic discourse.

Instead, when a theory of behavior is needed for descriptive purposes beyond policy evaluation, Mill clearly signals the existence of causes of will other than desire, thus embracing a multidimensional vision of Bentham's *Springs of Action* (as shown in Figure 4.2). The first cause of will other than desire is habit, which Mill frequently invokes as a major determinant of observed behavior. Mill states that consideration of habitual behavior clearly constitutes a criticism of Bentham's system, in so far as habits constitute a "force [...] in opposition perhaps to the deliberate preference, as often happens" (Mill, 1861b, p. 238). At the individual level, habit should not be considered in opposition to the hypothesis of rationality, when the latter is considered in a broad sense. On the contrary, Mill considers daily recourse to routines to be a substantially reasonable behavior, given the limited education of a vast part of the population at that time:

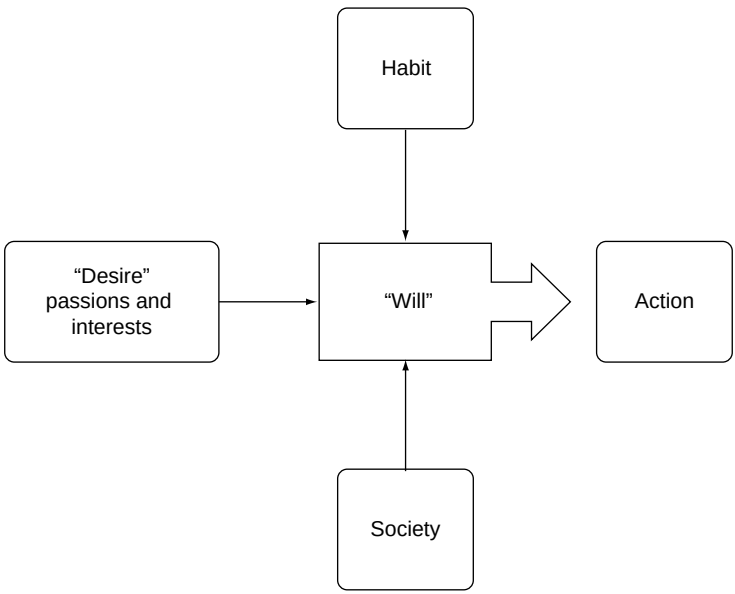


Figure 4.2 The causes of behavior according to Mill.

> truly the understandings of the majority of mankind would need to be much better cultivated than has ever yet been the case, before they be asked to place such reliance in their own power of estimating arguments, as to give up practical principles in which they have been born and bred, and which are the basis of much existing order of the world […]
>
> (Mill, 1869, p. 3)

At the social level, the whole essay *Coleridge* is devoted to arguing that even traditional arrangements need not always be inefficient:

> the generality of a practice is in some cases a strong presumption that it is, or at all events once was, conductive to laudable ends. This is the case, when the practice was first adopted, or afterwards kept up, as a means to such ends, and was grounded on experience of the mode in which they could be most effectually attained.
>
> (Mill, 1869, p. 4)

Coherent with Mill's progressive stance, the argument is reversed with respect to traditional institutions. In this case, no presumption in their favor can be inferred from their existence, because this only evidences that such arrangements were preferred by a powerful class at that time. Even with respect to this class's interest, these institutions may later prove outdated, and "the considerations which recommended it may, like so many other primeval social facts of the greatest importance, have subsequently, in the course of ages, ceased to exist." (Mill, 1869, p. 4).

According to Mill, habit-driven behavior is particularly pervasive in the economic domain of society.[5] This, however, facilitates descriptive economic analysis because economic behavior exhibits frequent regularities and empirical laws; that is, the pervasiveness of habits facilitates the use of *ceteris paribus* hypotheses. In *Principles*, habit-driven behavior is especially characteristic of consumers, as discussed in the next chapter, but firms are not exempt from habit-driven behavior either. For example, Mill counts the employment of professional managers as a leading factor in granting economies of scale to bigger firms (Mill, 1871, p. 45), on the grounds that the smaller firms, because they are directly managed by the unprofessional owners, are usually run on a routine basis. Hence, smaller firms are less dynamically efficient, since routines prevent the search for better strategies.

As in the general case, Mill appears to have an ambiguous attitude – one of moderate criticism rather than outright condemnation, specifically towards firms' and workers' routine behavior. On the one hand, he believes that such behavior prevents the development of great innovations, and the *stimulus* to abandon routines is indeed one of Mill's arguments in favour of free competition:

> A limitation of competition, however partial, may have mischievous effects quite disproportioned to the apparent cause. […] When relieved from the immediate stimulus of competition, producers and dealers grow indifferent

> to the dictates of their ultimate pecuniary interest; preferring to the most hopeful prospects, the present ease of adhering to routine.
>
> (Ibid., p. 928)

On the other hand, in his economic analysis one of the advantages of the division of labor is the establishment of routine activities within each occupation, making every person a more productive worker: "No illustration is requisite to show how the efficacy of industry is promoted by the manual dexterity of those who perform mere routine processes" (ibid., p. 106).

As shown in Figure 4.2, next to individuals' desire and habit, another major source of individual will is society. Mill distinguishes several channels through which social institutions affect or even determine individual behavior, and he criticizes Bentham's philosophy "[…] for it assumes that mankind are alike in all times and places, that they have the same wants and are exposed to the same evils" (Mill, 1833, p. 16).

In fact, it should be noted that Bentham did recognize three channels through which incentives (especially sanctions) affect individual behavior: religion, law, and public opinion. Thus, Mill's critique is against the view that society only matters as a means of producing pain or pleasure in the individual:

> […] the whole of the impelling or restraining principles, whether of this or of another world, which he [Bentham] recognises, are either self-love or love or hatred towards other sentient beings. […] If we find the words "Conscience", "Principle", "Moral Rectitude", "Moral Duty", in his Table of the Springs of Action, it is among the synonyms of the "love of reputation"; […]
>
> (Mill, 1838, p. 95)

(Notice the similarity between Bentham's approach, as it is presented by Mill, and the contemporary economic approach to individuals' social identity, as framed by the pioneering works by Akerlof, 1980; and Akerlof and Kranton, 2000). Mill recognizes the relevance of the three channels considered by Bentham: religion and law are two means by which some social groups exert power over others, whereas the role of public opinion, connected to the desire to be loved and held in esteem by the community, had already been pointed out by Adam Smith (1759). Mill's emphasis is on adding more channels through which society may impact on both desire and will – for example, social norms, emulation and class membership. However, the most relevant ones are cultural authority, "the evidence on which the mass of mankind believe everything which they are said to know, except facts of which their own senses have taken cognizance" (Mill, 1874, p. 408); and education, whose "power […] is almost boundless: there is no natural inclination which it is not strong enough to coerce and, if needful, to destroy by disuse" (ibid., p. 410).[6]

Mill criticizes any attempt to describe behavior independently of social conditions, because such conditions could lead to outcomes opposed to those that would be implied by individual desire. This is all the more true the more time goes on, and social development with it:

> But as society proceeds in its development, its phænomena are determined, more and more, not by the simple tendencies of universal human nature, but by the accumulated influences of past generations over the present.
>
> (Mill, 1865, p. 315)

In the field of political economy, this observation is crucial for its methodological implications. Once we recognize that social conditions differ considerably between the individual members of a given society, Mill's theory implies the rejection of the hypothesis of a unique model of behavior even within one society. Typical examples in the economic sphere include the far greater role played by customary and habitual behavior in Mill's analysis of laborers and customers, as compared, for example, to their influence on firms and capitalists (discussed in the next chapter); or the propensity towards disinterested altruism that Mill attributes only to men, as a consequence of women's poor education and social subjection, which forced them exclusively and unnaturally to focus on the well-being of their households (an analysis discussed in Chapter 8).

Finally, Mill forcefully argues that both habit and society affect not only will, but also desire:

> Men lose their high aspirations as they lose their intellectual tastes, because they have not time or opportunity for indulging in them; and they addict themselves to inferior pleasures, not because they deliberately prefer them, but because they are either the only ones to which they have access, or the only ones which they are any longer capable of enjoying.
>
> (Mill, 1861b, p. 213)

> We have now considered two powers, that of authority, and that of early education, which operate through men's *involuntary beliefs, feelings and desires* […]. Let us now consider a third power […]. This is the power of public opinion; of the praise and blame, the favour and disfavour, of their fellow creatures […]
>
> (Mill, 1874, p. 410, italics added)

The subject is so important to Mill that he feels compelled to devote a whole chapter of *Logic* to the rather outlandish topic of how the existence of undeniable laws of the formation of character can be reconciled with the idea of liberty: "the danger is, not that [the power of these forces] should be insufficient, but that it should be so excessive as to interfere unduly with human freedom and individuality" (Mill, 1861b, p. 232).

Consequently, within the theory of behavior, discarding these elements leads to a hampered consideration of individual motives as well. These indirect effects of habit and social conditions upon behavior are represented in Figure 4.3 by dashed arrows, whilst the influence of individual action on habit and society is represented by dotted links.

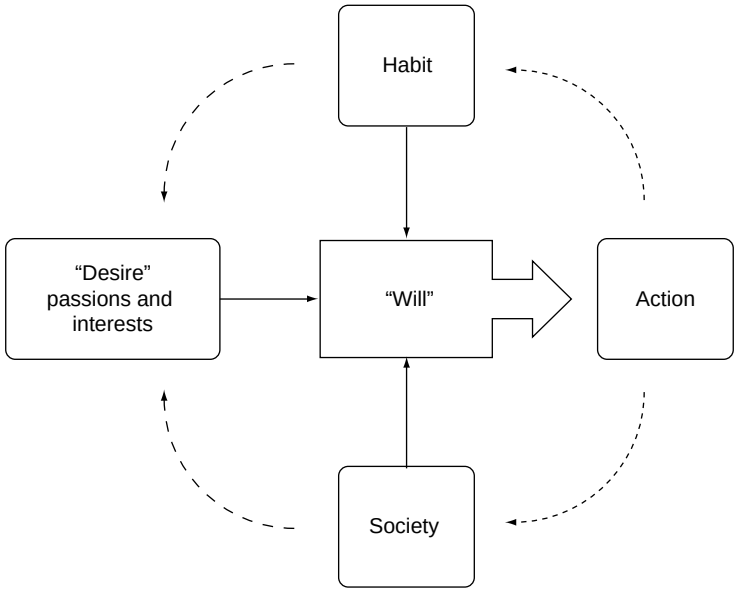


Figure 4.3 Mill's theory of behavior.

The fact that action has an impact on habit formation is also the main ground for Mill's objection to simple consequentialism in the field of ethics – that is, of the practice of assessing the morality of an act taken in isolation – and for his proposal of an ethics of rules assumed to be generally adopted (so-called rule utilitarianism). For example, Mill frequently argues against certain actions due to their potential morally to corrupt their instigator, irrespective of the immediate and direct evaluation of their short-term impact on utility (Dryer, 1969). For example, Mill typically opposed lying "for good" (namely with the aim to increase one's happiness without reducing that of anybody) because, assuming lying would become a person's habitual behavior, it would morally corrupt the individual. Thus, although lying could sometimes be justified on the basis of simple utilitarian criteria, rule utilitarianism consistently rejects lying.

Finally, this last connection, showing that people's actions determine the general conduct of society, is not simply stated in its straightforward form as a summation of individual behaviors, but instead it constitutes a basis for Mill's theory of social development, conceived as an endogenous process of evolving power relations (see Chapter 6).

Overall, the analysis of Mill's works allows us to draw a detailed picture of human behavior that is rich and flexible, while clearly remaining historically determined. Mill refuses to conceive of behavior deductively as an innate or a priori given, and least of all as immutable or natural:

> Men, with that inability to recognise their own work which distinguishes the unanalytic mind, indolently believe that the tree grows of itself in the way they have made it grow. […] History […] teaches another lesson: if only by showing the extraordinary susceptibility of human nature to external influences, and the extreme variableness of those of its manifestations which are supposed to be most universal and uniform.
>
> (Mill, 1869, p. 65)

Specifically, the theory outlined here is aimed at representing the behavior of individuals who are embedded in a modern Western capitalist society: "Political Economy does not treat of the production and distribution of wealth in all states of mankind, but only in what is termed the social state" (Mill, 1844, p. 319).

An apparent problem arises, however, if Mill is to ground social dynamics on individuals' agency and simultaneously the latter upon the former. As will be discussed in the next chapter, Mill's solution rests on a dynamic vision typical of classical economists. The two causal directions, from society to the individual and the other way round, can be studied separately because society is assumed to shape behavior at a considerably faster pace than behavior could ever shape society. It follows that in the medium to short term we can study behavior by taking society as an approximate given – exactly the methodology Mill envisaged for political economy. It is instead the task of ethology to explain social evolution and to provide the input for economic analysis. As such, the economic analysis of behavior here exposed is "partial", as Mill recognized, not because it cannot account for the whole of individuals' behavior, but because to do so it requires relevant additional information. That without ethology his theory ultimately remains an abstract black box is precisely the criticism that Schmoller addressed to Mill. To paraphrase the latter's assessment of RUT, Mill did no more than dress up the (not so trivial anymore) proposition that all persons do what they feel themselves most disposed to do, and that their disposition depends on their (given) habits, social influences, individual interests and passions.

Schmoller and the interconnectedness of the social sciences

There is an Aristotelian theme common to both Mill's and Schmoller's analyses of human behavior, namely the overlapping of descriptive and moral considerations leading to a hierarchical ordering of pleasures (or instincts, in Schmoller's terminology). Lower pleasures are evidently the physical ones, inherited by us from the ancient barbaric and savage states of society. Pleasures and instincts of the higher order are the intellectual and moral ones; one may say that the farther they are from our bodily necessities, the higher the apparent "value" of these pleasures. What is characteristic of both Mill's and Schmoller's treatments is that they claim descriptively that the moral and hedonistic ordering of pleasures overlap and even coincide; that is, people enjoy more the pleasures of the higher order if they have occasion to experience them or if they are so taught. The assumption that pleasures of the higher order are also more pleasurable, namely

that they lead to greater, more enduring and stable happiness, led Mill to formulate his famous aphorism in *Utilitarianism* that it is "better to be Socrates dissatisfied than a fool satisfied" (Mill, 1861b, p. 212). Indeed, Mill's defense of utilitarianism from the accusation of inducing individuals to be hedonistically selfish rests crucially on the hypothesis that educated people will increasingly identify their own pleasure with the interests and happiness of others.

Mill and Schmoller differ in the ethical consequences but agree on the scientific implications that arise from such an Aristotelian position. From the moral point of view, the highest pleasure and the ultimate happiness to Mill – indeed, his concept of the meaning of life – is human *flourishing*. By this he means the simultaneous development of one's intellectual ("mental") and moral capacities, where happiness is produced within the process rather than by the final achievement of a hypothetical inner perfection that is never reached. To Mill, moral and intellectual capacities exhibit a double interrelation: on the one hand, more educated people experience more happiness resulting from higher-order pleasures (moral pleasures); on the other hand, education exerts such a strong influence on character as to determine a person's tastes and moral feelings. In accordance with his liberal stance, Mill defines truly moral behavior in terms of the reason and consequences, not of adherence to some external canon of ethics:

> pursuing spiritual perfection as an end; […] desiring, for its own sake, the conformity of his own character to his standard of excellence, without hope of good or fear of evil.
>
> (Mill, 1838, p. 95)

Schmoller similarly develops an ordering of pleasures that ranks the intellectual and moral pleasures higher than the physical. However, unlike Mill he attributes the power of morals and ethics neither to the individuals' conscience nor to cultural authority but to the descent of custom and morals from religion, and the continuing will to preserve a social peace on the part of those who hold political power. As mentioned, Schmoller's political standpoint differs crucially from that of Mill in the former's rejection of socialism and liberalism alike. Thus, as a result of such a sedimentation of socially induced rules of behavior, Schmoller outlines – and in his frequent moral judgments of most social institutions constantly refers to – a system of ethics objectively given and external to the individual:

> Despite all variations, the commonality of human nature, of social development and of the development of the world of ideas determined among all the most developed populations a noteworthy concordance of duties, of virtues, of the objectives of the moral conscience. Throughout a millennial experience it was increasingly seen that individual happines, like social welfare, requires the same conditions, the same actions, the same feelings […] that can be summarized into a small number of simple rules and ideas […] "Establish and ameliorate yourself", "love your neighbor like yourself",

> "recognize to each his own", "have awareness of being part of the community to which you belong", "be humble in front of God, conscious of yourself, but modest with other men" – these are the precepts taught today in every part of the world by all religions.
>
> (Schmoller, 1900, p. 45)[7]

From a descriptive point of view, however, the two writers agree in noticing that, to the extent that motives of human conduct other than self-interest could lead to happiness in a more extensive meaning of the term, the doctrine of a behavior exclusively driven by selfishness implies an incomplete definition of pleasure and pain; it "confounds two very different ideas, of happiness, and content" (Mill, 1861b, p. 212). Thus, such a theory will exhibit systematic predictive failures especially if agents really behaved only according to hedonistic motives, because these increasingly coincide with moral behavior.

Evidently, this critique only applies to the DUT interpretation of Bentham's theory, which was most prevalent during the early phases of marginalism. This was certainly the approach that Schmoller had in mind, since he was referring mainly to the Austrian approach to marginalism, which in Menger's work exhibits not only the hypothesis that pleasures and pains can be listed abstractly in a definite taxonomy, but that they may even be given a lexicographic ordering.

As Mill, Schmoller abstains from depicting a fully fledged theory of behavior in *Grundriß*, especially because such a theory would have risked forming a set of a priori hypotheses – universally applicable, and hence in overt contradiction to Schmoller's main methodological tenets. Not surprisingly, Schmoller holds the view that individual behavior and its motives (*Antriebe*) evolve with the progress of human society.

His exposition of the "psychological bases" of political economy starts with some concession to the nascent marginalist consensus,[8] in some passages even appearing to affirm the necessity of founding economic science on the two pillars of methodological individualism and the *homo economicus* hypothesis. For example, in the introduction there are passages claiming that political economy should be founded on the study of individual behavior, and in turn that "the foundation of any individual action [...] are the feelings of pleasure and of pain" (Schmoller, 1900, p. 20).[9]

To accentuate these considerations with a historical flourish, Schmoller justifies them partly on an evolutionary-biological basis: "the instinctual life [...] is a consequence of the historical development of our nerves and of our whole spiritual and cultural nature" (ibid., p. 27).[10] He thus claims that the supremacy of pleasure and pain over the other instincts derives from the instinct for self-preservation. Modifying slightly Bentham's approach, which distinguished at least seven properties of the feelings of both pleasure and pain (intensity, duration, certainty, propinquity, fecundity, purity and extent), Schmoller claimed that these feelings may be different in terms of intensity, duration, complexity, and "truth".

After these preliminary notes, however, Schmoller immediately warns that individuals' behavior, even individuals' pleasures and pains, are to a certain extent the result rather then the source of social change:

> the idea that it is possible to demonstrate the existence, among all the human beings of all times, of a certain number of given instincts, always the same, should be left aside.
>
> (Ibid., p. 27)[11]

The evolution from social change to individual psyche can be interpreted also, though not solely, on the basis of historical materialism. Schmoller refused to condemn the partiality of Marx's approach to history, considering it "a legitimate protest against the exaggerations of the idealistic historical paradigm" (ibid., p. 147).[12] According to Schmoller, a complete analysis of social change would consider both approaches: the idealist, highlighting the links from the spiritual elements to social dynamics; and the materialist, focusing on changes in the methods of production.

As also emerges from an analysis of Schmoller's outline of general economic history (in the same Introduction) and of the many other historical discussions throughout *Grundriß*, he is not far from applying the method of historical materialism in his treatment of the emergence of social institutions (considered as consolidated offspring of the productive structure). What he criticizes is its one-sidedness: the lack of reference to any primitive instincts other than the acquisitive, and the apparent ignorance of the economic consequences of (supposedly) non-economic spheres of social life (for example, when an individual's budget is used to satisfy other instincts). Indeed, these consequences relevant to the economic sphere would be a sufficient reason for political economy to deal with such apparently non-economic topics. To Schmoller, culture, economy and society are constantly interlinked: "[…] the same action can have many aspects: moral, economic, legal" (Schefold, 1993).

Thus, Schmoller qualifies his opinion on the *homo economicus* hypothesis and, crucially, circumscribes its applicability. The acquisitive instinct, in its gradual development, rests upon:

1 social and technical conditions;
2 moral ideas, custom and legal limitations;
3 primitive instincts and primitive feelings of pleasure, which act upon every individual.

Schmoller defines a further five primitive instincts or "needs" which act as sources of action. They operate in any period, though in different forms: the acquisitive instinct, the desire for the esteem of others, the instinct of rivalry, that of activity, the sexual instinct, and the instinct of self-survival. To each of them Schmoller devotes a section of the second part of the Introduction to *Grundriß*. According to Schmoller, these instincts are checked and modified

throughout history by at least three social factors: social censorship, state punishment and religious ideas (the same channels identified by Bentham, as noted above).

These channels of social influence on individuals' behavior constitute another interesting convergence of Mill's and Schmoller's thought. Moreover, both authors conceive of the rational self-interested model of economic behavior as a poor but relatively better approximation of reality under capitalism than in the previous stages of development. We may find in both oeuvres passages that closely resemble the idea (later developed thoroughly by Weber, 1922) of a historically increasing diffusion of self-interested rational behavior as a relevant feature of capitalism. For example:

> [...] interest in the common good is at present so weak a motive in the generality, not because it can never be otherwise, but because the mind is not accustomed to dwell on it as it dwells from morning till night on things which tend only to personal advantage. [...] the deep rooted selfishness which forms the general character of the existing state of society, is so deeply rooted, only because the whole course of existing institutions tends to foster it.
>
> (Mill, 1873, p. 241, original italics)

> The acquisitive instinct [...] is not an original instinct, fundamental as for example the instinct of survival [...] It is a late consequence of an enlarged instinct of self-preservation and of that of activity coupled with individuals' egoism, by which instinct it is generated in certain stages of economic culture; [...] Millennia of economic activity have taken place without it being there.
>
> (Schmoller, 1900, p. 36)[13]

Both in Mill and Schmoller this development is not necessarily positive, given the low order of the most selfish pleasures both in moral terms (thus leading to a corruption of the individual) and from a hedonistic perspective (in fact producing less pleasure than the higher-order pleasures, if only they were fairly assessed). Schmoller's detachment from the liberal stance, however, induces him to perceive in such a development also the origin of much social turmoil. Without artificially portraying the previous stages of development as the loci of social peace and happiness of all, and though being aware of the material improvements brought about by the display of egoistic selfishness, Schmoller warns against modifications in the moral sphere of the national Spirit, induced by the development of Western capitalism:

> In times of maximum economic prosperity [...] it easily happens that the acquisitive instinct, legitimate per se, degenerates in that febrile yearning of large and immediate profit [...]. If a simplistic materialism today elates every inconsiderate manifestation of the acquisitive instinct as the engine of

> human progress, we must recognize that the great economic achievements of our civilized nations would not be possible without a vigorous development of such instinct, even a boundless one. But we deem it not the less certain that pushing the acquisitive instinct up to cruelty may result into embittering social relations, disturbing the social peace. By generating hate and social brutality, by giving rise to fights, it may undermine and eradicate the welfare so far achieved.
>
> (Schmoller, 1897, p. 58)

Schmoller begins his analysis with the prehistoric age, during which man emerges as a gregarious animal. According to Schmoller, the tendency to live in society descends mainly from blood linkages, which in time became less relevant, and evolved into territorial associations (such as urban agglomerations, tribes, populations). In this context, Schmoller's brief discussion of aspects of economic geography is but an example of his multidisciplinary approach, or rather of his belief in the interconnectedness of the social sciences, and in the need to explain social phenomena by means of economic, sociological, and cultural factors.

Highlighting the passage from the first nomadic stage through to agriculture and *Eigenwirtschaft* (self-economy, on which see Chapters 2 and 7), he identifies a number of determinant factors of settlement: the division of land property, relations of neighborhood, love of country, home ownership. During this period, through times of peace and war and the subsequent necessity of coordination and subordination of men for common purposes, there emerge organization, authority, power relations, and the administration of justice. Also morals, law, and religion start out as organized instruments, but then develop into ends of their own.

From this moment, when a rather sedentary and aggregative life becomes an established feature of human existence and when social institutions develop, an analysis of behavior considering the individual in isolation is no longer legitimate.

Indeed, with regard to many topics the analysis should not even concern the behavior of an individual in society; rather, the best method appears to be the analysis of aggregate behavior. For example, as discussed above, to Mill a crucial lack of realism in the most vulgar interpretations of Bentham's theory is the hypothesis of brute selfishness. Mill thought that as society develops and as the cultural and educational level of the population increased individuals would increasingly identify their happiness with the interests of others. While Schmoller does not directly criticize such a position, we can infer from his works that the issue, when approached only at the individual level, is in his opinion wrongly framed. When dealing with the issue of selfishness as opposed to altruism, citizenship (intended as a social organ in the sense defined in the previous chapter) "looked upon itself as forming a whole, and a whole that was limited as narrowly as possible, and for ever bound together" (Schmoller, 1897, p. 3).

From the moment in which political and cultural institutions emerge, together with a division of labor, single individuals cooperate – whether willingly or not

– and any talk of strict selfishness is nonsense. Nobody could live by themselves even during the old savage stage, when joint efforts were needed for provisioning and defense:

> All economic and political life rests upon psychical mass-movements, mass-sentiments, and mass-conceptions, gravitating around certain centres. […] Each new political community that forms itself must be carried along by a strong and exclusive feeling of community; these are the roots of its strength.
>
> (Ibid., p. 25)

At the same time, these small communities, be they villages, towns or provinces, are not the place of an idealized universal love:

> This prosperity could rest upon no other "mass-psychological cause" than corporate selfishness: new economic structures could arise only in oases thus privileged, and not on the broad bases of whole states. So long as this selfish feeling of community within comparatively narrow circles also brought about an energetic movement forward, it justified itself, in spite of a coarseness and violence which we today not only disapprove but even scarcely understand.
>
> (Ibid., p. 5)

Thus, cooperation and a sense of common belonging characterize the individuals of a single small society, whereas in the aggregate such collectivity exhibits ruthless selfishness towards other communities. In the face of this ambivalence, Schmoller does detect a process of historical improvement of people's moral feelings, in the specific sense that the norms and uses regulating relations between societies (lately, international law regulating international relations) gradually become ever more civilized and substitute violence for bargaining. But most notably, civilization of relations develops because these narrow societies exhibit a strong trend towards merging and enlargement: starting from kinships, "efforts and tendencies everywhere made their appearance towards some larger grouping of economic forces" (ibid., p. 5). They gradually develop into villages, then towns, counties, nations, and possibly even international bodies in the future (see Chapter 2).

However, even if for some reason we take issue exclusively with individuals' behavior, sole reliance only on individual factors is an inappropriate method of explanation, for two reasons. First, there is an influence of society upon the individual, including on the sphere considered by the *homo economicus* hypothesis – that is, social institutions set limits on the natural pull of acquisitive forces. Second, to the pervasiveness of collective action:

> […] almost all men satisfy a large part of their needs, and fulfil the largest part of their duties, not as individuals, but as members of certain social organs.
>
> (Schmoller, 1900, p. 6)[14]

While collective action was dealt with in the previous chapter, concerning the former argument we can find in *Grundriß* almost the same interactions between individual and social sources of action that were summarized in the previous paragraph on Mill – namely emulation and habit formation, social influences upon the individual's psyche and upon social institutions. Obviously, the major difference with Mill's treatment is that in Schmoller's case it is necessary to consider not only differences between persons within one society, but also between societies, or within the same society at different times (a typical example is the comparison of ancient and modern times).

Concerning social institutions, where Mill elevated education to a central role due to his adherence to associationist psychology, idealism is what lies at the base of Schmoller's similar emphasis on education and culture. For example, dealing with class struggles, he notices:

> [...] not the school alone, but still the school essentially, and in combination with the other means and institutions of psychical, mental, and moral training, controls the future of our lower classes. The more our whole system of culture and instruction is detached from the family, the more it takes shape as a great independent organization in the hands of the state, [...] the more will counterweights be created for the unfortunate hereditary class influences. [...] school, press, theatre, public opinion, exert upon the whole population more and more a unifying, levelling influence. A spiritual fluid has been created, which [...] to a certain extent democratizes society.
>
> (Schmoller, 1914, p. 510)

Concerning habit-driven behavior, Schmoller frequently notices that all those who are in contact involuntarily exchange feelings and customs. Emulation constitutes a crucial element in determining the dynamics of the interaction between individual and aggregate behavior:

> The single individual is like a lamp, into which the family, the environment, the Nation and the Church, Culture and Science pour oil.
>
> (Schmoller, 1900, p. 15)[15]

These influences produce an overall historical movement of both countries' and individuals' characters towards a convergence of behaviors:

> [...] needs are, in each individual, the result of his race, of his education, of the events of his life. They exhibit in every place and population noteworthy differences, according to the individuals, the classes, the earnings; the process of diffusion of the needs of superior order also rests upon the fact that the progresses made on the point are slowly transferred from person to person, from class to class, from country to country.
>
> (Ibid., p. 24)[16]

In fact, this process of convergence towards a uniformity of behavior involves the economic sphere (summarized by Schmoller's reference to needs and, implicitly, the means to satisfy them) as a particularly relevant factor: "from no other point of view, as that of needs, does man appear as a gregarious animal, dominated by the instinct of emulation" (ibid., p. 24).[17] As also noted in Mill's analysis, the economists of the late nineteenth century tended to consider individuals in the new capitalist society as being more alike, hence more liable to a summarizing aggregative analysis, in the economic sphere of action rather than, for example, in cultural or moral spheres.

Schmoller identifies a number of social influences upon behavior affecting individuals' actions in terms of differentiation and atomization, as well as a number of opposing influences leading to uniformity of behavior or collective agency. The most often recurring and relevant factors are summarized in Table 4.1.

With respect to this classification we can be more precise on Schmoller's hypothesis of convergence of individual behaviors. First, on the basis of the historical analysis of Western civilization he held that class and educational differences (the major causes of individual differences) historically tend to decrease in relation to one another, and that their impact tends to be softened by means of the introduction of more refined social institutions (see Chapter 6). Analyzing the case of Europe, Schmoller maintains that the smaller the differences of class and education, and the more equal are the "conditions of existence" by which people are dominated (that is, the institutional and technological environment), the more the members of a community tend to be similar in their feelings, interests, ideas and habits. The result of this process is that, by the stage of national capitalism, all men living in the same conditions tend to be exposed to the same causes and influences and they will therefore exhibit essentially the same physical and spiritual qualities (ibid., p. 16).

Second, Schmoller explicitly assumed that those factors leading to uniformity (the unifying forces in Table 4.1) ultimately tend to prevail over the differentiating factors:

> […] every person is dominated by, and depends upon, the environment in which he lives, that is upon the men [among which] and the conditions of existence in which he finds himself. Among these conditions, those determined by the spiritual elements are the most important.
>
> (ibid., p. 15)[18]

Table 4.1 The causes of individual differences according to Schmoller

Differentiating factors	*Unifying factors*
Class	Spirit *(as composed of, for example:)*
Education	Culture
Race	Language
Income	Religion

Thus, convergence of behavior emerges as a consequence of an absolute reduction of the differentiating factors, and of the higher effectiveness, ultimately, of the unifying factors over the former.

A crucial passage of this process of convergence is the historical stage of mercantilism. Schmoller (1897) identifies as an essential feature of this period the emergence of nation states. Due to this process, political, linguistic and cultural factors converge towards the development of separate but connected spheres of collective consciousness within the same reference society. Previously, political, linguistic and institutional factors still tended to unify populations, but each within their own geographical borders, thus each defining a different "unity". For example, religion (Christianity) and empire, in certain periods and within certain limits, tended to be universal; language connected neighboring areas; political and economic factors unified cities and small neighboring areas. After the emergence of nation states, several aspects of spiritual life converged and contributed towards the same end result: unit defined by the country's borders. The objective Spirit acquires its more coherent form as national Spirit.

National societies and economies thus become possible categories of analysis for the social scientist. Indeed, they become relevant categories in so far as the "wealth of nations" refers, for Schmoller, not to a synthetic expression denoting the well-being of citizens individually considered (as was the case with Adam Smith and the British classical economists) but to a meaningful aggregate, not created by the scientists' abstraction but actually existing in the people's consciousness and possibly in their union as a social organ. This is Schmoller's rationale for the macroeconomic analysis of national economies. Thus, the implication considered in the previous chapter, that macroeconomic analysis implies a single class and not a classless society, in Schmoller's case is an explicit feature of the analysis, based on the hypothesis that all spheres of consciousness are ultimately comprised within the unitary national Spirit.

On the contrary, the process of the convergence of behaviors as discussed above is not part of the rationale for macroeconomic analysis, because the described homologation of behavior across individuals is a direction of movement and not an established result. New social classes are always emerging (as described in the next chapter) and with them emerge new social differences. Thus, as in Schmoller's treatment, an analysis of individuals' behavior based on our concept of diversity appears to be appropriate to social analysis of a certain society, whereas reference to national aggregates remains useful for the comparison of a certain society in space or the consideration of its evolution in time.

A relevant example among the factors listed in Table 4.1 is race. As is well described by Peart and Levy (2005), towards the end of the nineteenth century racial theories of humanity grew increasingly popular among social scientists. Schmoller dedicates a whole chapter to the economic relevance of "Race and Populations", which he begins with an account of the aforementioned evolution from classical to post-classical economic thought:

> While today we start out from the idea that populations are physiological and psychological units bound together by affinities of blood and Spirit, and that they maintain a certain character for many generations and centuries […], in the eighteenth century the science of the State, of society and of political economy used to start out from the idea of a natural equality of men. It consequently aimed at determining the general and abstract essence of man's nature and at explaining social institutions by building them to derive from such a nature. Still today, a great part of the most abstract considerations of this social science rests on the concept, true and acceptable within certain limits, of a certain conformity of character among Western civilized populations.
>
> (Schmoller, 1900, pp. 140–141)[19]

From Schmoller's own words it is evident that by race he actually means a set of both physical and cultural factors, and that ultimately he is interested in the economic relevance of a people's national character, as was Mill. Indeed Schmoller acknowledges this position on Mill's side (ibid., p. 215) but blames him for not having developed it thoroughly in his work, thus making it appear as an empty statement of purpose. However, Schmoller does not place himself at the other extreme of the methodological spectrum, but rather he advocates an integration of the two causal nexuses: that deriving the micro from the macro, and the parallel investigation of the formation and development of the macro (especially the spiritual) institutions. Thus, concerning the development of races he writes:

> The theory of the influence of the "environment" is exaggerated to the point of claiming that education and social institutions may make anything of any men. It is the exaggeration opposite to [the one usually attached to] the thesis of the influence of nature.
>
> What we may say is that if on the one hand the individual, the class and the people are under the power of inherited qualities and instincts, of feelings and volitions of which they have no cognizance; on the other hand they also undergo the influence of the great spiritual flow surrounding them, which operates through emulation, education and social contacts. Delimiting these two series of causes is all the more difficult because every enduring action of the latter kind becomes custom and habit, it slowly impresses itself – even physiologically – in the body and organs and thus it starts passing on to the sphere of inherited factors.
>
> (Ibid., p. 146)[20]

Again, it is here evident that by "race" Schmoller in fact implies not mainly a biological taxonomy of species of human beings, that moreover would prove a static classification, but the set of all the characteristics making up a people's national character.

Interestingly, Schmoller notices that societal influences are not all the same. Rather, the more a certain spiritual factor (for example, education) exerts a

uniform impact across individuals, the more it is likely to be relevant in determining the characteristics of the collection of individuals. This argument may be applied to groupings other than race (for example, gender) and indeed it provides an operative rule for the researcher who aims to investigate diversity in our sense. It suggests the investigation not necessarily of the most powerful social influences on individuals' character (or of the social origins of interpersonal differences) but of those more likely to exert a similar effect on a certain social group, or a differentiated effect across groups. Using a statistical analogy, Schmoller suggests that the variance of social impact upon individuals may be as relevant as the mean impact (see Chapter 13).

In his treatment, Schmoller highlights two major determinants of the development of races and populations: the "mixture of races", tending towards the phasing out of racial differences, and the speed of change of the spiritual elements. While recognizing that in the very long run even certain bodily characteristics depend upon the environment in which a certain population has become used to living, in his treatment he considers those differences that presumably are of natural origin as fixed. That is, they constitute what we may here term "heterogeneity". In contrast, Schmoller attributes the backwards state of many populations (literally of "inferior races") mostly to the slow development of their objective Spirit. He draws heavily on the nascent anthropological and ethnographic literature, as well as on chronicles of long-distance travels and exploration, but ultimately it is clear that his main aim from an analytical point of view is to deny the universality of any law of human behavior, especially of the assumption of rational selfishness – the acquisitive instinct:

> Against the summaries of psychological characters that we provided, one could raise the objection that from them it does not clearly emerge what traits are a consequence of the hereditary kind of race, what of the morphology of the country, of the spiritual conditions and of the social institutions of the moment [...] Yet, the few that we know on these issues is already of some value and relevance for science.
>
> Any good economic description of countries, industries, agricultural conditions, begins today by providing a realistic ethnographic-psychological description of the men involved. Any economic assessment, in order to be sound, must consider not an abstract man or his acquisitive instinct, but the single varieties of races....
>
> (Ibid., p. 159)[21]

5 Consequences for economic theory and method

From an analysis of Schmoller's and Mill's theories of behavior it emerges that both authors were aware of the plurality of motives underlying human action, and of the inherent complexity that human multidimensionality and the interplay of individual and social institutions imply for the social sciences. The two authors tried to tackle this complexity through distinctly different strategies. Schmoller privileged the study of political economy through historical monographs, which more easily lent themselves to complete, holistic analyses of specific and concrete issues. On the other hand, Mill adopted a view of political economy as a theoretical and partial discipline requiring integration with the other social sciences, and he warned against the direct use of economic theory in real-world applications.

On the whole, the theoretical interpretation of Mill's thought, in its greater generality, will provide the backbone of the following analyses in the present work in so far as individual behavior is concerned. However, the description of Schmoller's position encourages further examination of certain examples from his work, as well as comparisons and some criticisms. Thus, in this chapter it seems convenient explicitly to draw some implications for economic analysis from Mill's and Schmoller's thought, with the aim to provide some actual examples of the role of two major developments upon Bentham's theory of behavior; that is, the impacts on behavior of habit and of social institutions. In particular, in the next paragraph I will discuss the implications of the theory of behavior described in the previous chapter for the status of the *homo economicus* hypothesis. The following two paragraphs deal respectively with Mill's theory of value as a relevant example of the pervasive role of habit-driven behavior in his economic theory, and with Schmoller's analysis of class relations as an example of the role of social institutions in shaping individuals' behavior. The final paragraph comes to some conclusions regarding the role of political economy, in the two authors' thinking, with respect to the other social sciences.

5.1 Mill and the *homo economicus* hypothesis

To consider – as is done in Figure 4.3 – the plurality and incommensurability of interests and passions, pervasive habit formation and the role of social

institutions all as simultaneous determinants of individual behavior requires a clarification of what precisely is meant by "individuals' rationality". As mentioned, on this point the late Schmoller appears formally to pay some recognition to the nascent marginalist approach (Schmoller, 1900, p. 97). However, in his practice he coherently followed the scientific paradigm of realism and multidisciplinarity, thus frequently referring to a plurality of causes for any certain behavior. Indeed, the historical method may help in ex-post synthesis of this complexity since the contrasting factors are necessarily settled in the end, if any action was in fact taken.

Mill uses instead a specific behavioral hypothesis: to delimit the scope of political economy from a potentially unmanageable number of concomitant factors to a precise sphere of human action. He forcefully expresses the point in his juvenile essay on the method of political economy:

> [...] what is now commonly understood by the term "Political Economy" is not the science of speculative politics, but a branch of that science. It does not treat of the whole of man's nature as modified by the social state, nor of the whole conduct of man in society. It is concerned with him solely as a being who desires to possess wealth, and who is capable of judging of the comparative efficacy of means for obtaining that end. [...] It makes abstraction of every other human passion or motive.
>
> (Mill, 1844, p. 321)

The de facto adoption by Mill of a larger and more general theory of behavior, in *Principles* and elsewhere, has lead some historians of economics to see a hiatus between Mill's 1844 essay and *Principles.*

Some scholars justify such a difference between Mill's early statements and his later practice with the distinction between "science", discussed in the 1844 essay, and "art" or the application of science, which is found in *Principles* (see, for example, Bladen, 1965; or Whitaker, 1975). Schumpeter, who as we have already seen was not particularly impressed by Mill, refers to "[...] the incessant hurry that all his writings display" (Schumpeter, 1954, p. 528). Hollander (1985) attributes a certain relevance to Mill's troubled emotional and intellectual relations with his father and Bentham, and to the nervous breakdown that dogged Mill's life during his early twenties and that lead him to rethink many of their positions. Such considerations would imply a departure on Mill's side from strict Ricardian political economy, by which it is frequently implied a purely deductive science based on the *homo economicus* hypothesis (although it should be recalled that Ricardo's *Principles* were significantly more focused than Mill's on the investigation of only a few economic phenomena, and they were not meant to prove an all-encompassing treatise of political economy). Thus, these interpretations of Mill's intellectual evolution are distinct but related to the claim by several Sraffian scholars that Mill's theory of value proved a substantial departure from British political economy, paving the way to the subsequent marginalist paradigm.

Indeed, Mill explicitly reports in the *Autobiography* that fear of his father's sentiments induced him to understate his real criticisms towards Bentham's philosophy in the first phase of his activity (Mill, 1873, p. 75). It cannot be denied that even the wording of the 1844 essay suffers from certain anomalies with respect to Mill's later practice. Compare, for example, the use in the citation above of the masculine forms "man" and "him" to denote all human beings, as opposed to Mill's usually careful attention to the use of gender-neutral language. However, although the historical reconstructions put forward by such eminent scholars retain a certain credibility, a final word on the issue of whether or not and to what extent Mill modified his views would appear not strictly necessary to a coherent interpretation of his thought, both at a young and an old age. Indeed, no substantial contradiction between the the 1844 essay and *Principles* emerges if the modern reader is not caught in the error of attributing to some terms, specifically "rationality" or "wealth", the meaning that later marginalist usage instilled in them.

First, let us recall that according to Mill political economy is only incidentally concerned with the theory of individual behavior, because it does not deal with the whole of social reality nor does it necessarily ground all analyses on microanalyses of individuals. Consideration for individuals' behavior is rather necessary as the implicit hypothesis underlying the analysis of aggregate behavior.

Concerning wealth, Mill is very explicit in the "Preliminary Remarks" to *Principles* in explaining that wealth is the sum total of all "useful and agreeable things" that have a positive exchange value – that is, goods that cannot be obtained in an indeterminate quantity without effort. However, this aggregate matters only because of the power that wealth confers:

> We really, and justly, look upon a person as possessing the advantages of wealth, not in proportion to the useful and agreeable things of which he is in the actual enjoyment, but to his command over the general fund of things useful and agreeable; the power he possesses of providing for any exigency, or obtaining any object of desire.
>
> (Mill, 1871, p. 6)[1]

Thus, even by only considering individuals' desire for wealth, political economy allows for a multiplicity of individual desires, wealth (purchasing power, in modern terms) being merely the means to satisfy them. By contrast, the investigation into what these desires may be and how they are formed, in Mill's opinion, does not pertain to the field of political economy, whose object is:

> We say, the production and distribution [of wealth], not, as is usual with writers on this science, the production, distribution, and consumption. For we contend that Political Economy, as conceived by those very writers, has nothing to do with the consumption of wealth, further than as the consideration of it is inseparable from that of production, or from that of distribution.

> We know not of any laws of the consumption of wealth as the subject of a distinct science: they can be no other than the laws of human enjoyment.
>
> (Mill, 1844, p. 318n, original italics)

Such laws of human enjoyment belong to the kind of laws that "appertain to man as a mere individual, and do not presuppose, as a necessary condition, the existence of other individuals" (ibid., p. 319). They thus form part of ethology and psychology or "pure mental philosophy". In this passage, it is noteworthy that Mill interprets classical political economy before him to be substantially in the same vein ("as conceived by those very writers" whereby he implies the major British Classical economists up to him). Written almost 30 years before Jevons' major works, such a position implies an a priori disregard of the latter's approach to individual behavior, and indeed Mill's later reception of Jevons' *Principles* was very negative (Maas, 2005). Political economy, already to the young Mill of *Some Unsettled Questions*, before the alleged shift in his position, is only concerned with those "principles of human nature which are peculiarly connected with the ideas and feelings generated in man by living in a state of *society*" (Mill, 1844, p. 320, original italics).

Concerning the concept of rationality, in the same 1844 essay Mill implies a considerably looser and less strict definition than its marginalist interpretation. That is, the postulate of rationality in Mill's view simply implies that, when dealing with one's self-interest, more is better than less:

> [economic] science then proceeds […] under the supposition that man is a being who is determined, by the necessity of his nature, to prefer a greater portion of wealth to a smaller in all cases.
>
> (Mill, 1844, p. 322)

To remark upon the difference between this broad idea of rationality and the later conception of *homo economicus*, one could note that Mill adopts this supposedly narrow and partial method well beyond the scope of political economy. For example, in the field of philosophy Mill stresses that "there is no difficulty in proving any ethical standard whatever to work ill, if we suppose universal idiocy to be conjoined with it." (Mill, 1861b, p. 224).

In this broad sense, classical economists have always assumed rationality, on grounds that the behavior of volitious agents cannot be explained only by means of *causes* of behavior, but some reference to individuals' *purposes* is necessary as well. Clearly not all individual aims must be rational, even in the broad sense, but some topics lend themselves more easily to such a simplification. This is the case for many issues dealt with by the economist, even if only from a qualitative point of view: for workers, more wages are better than fewer wages; for capitalists, more profits are better than fewer; and for rentiers, higher rents are desirable.

This consideration evidently applies also to classes, groups or organizations where individuals unite for a common purpose or purposes. Indeed, in these cases consideration of the purposes that lie at the core of the collective unit is a

major part of our knowledge of these aggregates. In Mill's approach both categories of classes introduced in Chapter 3 – that is, those instrumentally built by the scientist and those really existing – are defined on the very basis of aggregating individuals sharing the same purposes, while ignoring the other numerous differences among them. As a consequence, aggregates exhibit the rational self-interested pursuit of some specific purpose(s) as their characterizing feature, be it their reason for existence or the rationale behind their theorization. Thus, by construction their behavior appears as even more rational and consistently self-interested than individuals' conduct.

Since the core of British classical political economy – that is, the laws of production and distribution of wealth – frequently concern aggregate analyses (for example the distribution of the produce between the social classes), political economy will make use of such a hypothesis of broad rationality more often than the other social sciences. Interestingly enough, it is in the pursuit of self-interest that individuals are perceived by classical economists as more similar to each other, so as to allow for a collective representation of behavior, whereas it is in this very respect that marginalist economics will later stress the existence of heterogeneity across individuals (without which, as explained in Chapter 1, in a marketplace model there can hardly be any exchange at all).

A broader interpretation of the two concepts of wealth and rationality allows us to interpret Mill's claim on the partiality of economics as the science of rational behavior in the pursuit of wealth (that is, of purchasing power) as a mere restatement of his proposed division of the social sciences between ethology and psychology (disciplines studying the laws of human mind) and political economy (analyzing the social consequences of such laws).

Interlude: the theory of value

As mentioned in Chapter 2, there is a wealth of historical and secondary literature on John Stuart Mill, while Schmoller has been relatively neglected by the Anglophone world. Although the topic is only of minor concern to the issue of diversity, it may be necessary to provide some clarification of my own interpretation of the core of Mill's political economy, especially concerning the theory of value and distribution. First, Mill himself noted that this issue is central to political economy and that it determines the way one treats most other economic issues. Thus, a short account of Mill's treatment of it may facilitate a fuller understanding of some of the topics that will be dealt with in the following chapters (for example, the nature and scope of competition). Second, the theory of value and distribution is intimately related to the vision of the economic system referred to in Chapter 1, which indeed forms an integral part of the main thesis of this work. Thus, while the overview provided there seems sufficient to clarify Schmoller's position on the subject – certainly concerning our present aims – some widely diffused interpretations of Mill place his works midway between what I have termed the "market system vision" and the "marketplace vision", and some scholars have even attributed the latter viewpoint to him. Reference to Mill's theory is thus necessary to sustain the

argument that he held a pre-analytical vision of the economy not dissimilar from the previous British classical political economists.

Mill introduced two major innovations concerning the theory of value to the discipline of political economy: the introduction of an analogy with a hypothetical equation between supply and demand, as a way to conceptualize the mechanism of price determination; and the definition of the cost of production of a commodity as the sum of the wages and profits that are specific to that production sector.

Beyond his aim of establishing a definitive synthesis, specifically concerning the theory of value, there was an objective reason for Mill's attempts to innovate upon Ricardian analysis. Mill substantially aimed to correct Smith's position as to the method of determining market price. As is well known, Smith uses "effectual demand" to mean the demand of those who are willing and able to give for a certain commodity what he calls its natural price; that is, "the price which will enable it to be permanently produced and brought to market" (Smith, 1776, p. 57). Smith then proceeds to state that the market price is affected by the relative pressures of supply and effectual demand. In his *Principles*, Mill builds upon the same definition of effectual demand, but he then stresses the role played by competition in making the quantity demanded a function of the market price of the commodity, a role that had already been noticed by Smith. Thus, an apparent paradox follows, whereby the determination of value rests upon a ratio of quantities that are in turn dependent on it. Such a difficulty can only be solved by referring to the mathematical analogy of an equation, according to which

> […] the value which a commodity will bring in any market is no other than the value which, in that market, gives a demand just sufficient to carry off the existing or expected supply.
>
> (Mill, 1871, p. 468)

Roncaglia (2005) depicts this passage as a major early modification of the classical economists' theory of value. He maintains that thereby the market price ceases to be an empirical concept, as it was in Smith's and Ricardo's analyses, and it acquires the properties of a theoretical variable, liable to precise analysis. Moreover, while before Mill the natural price was considered to be produced mainly by free movements of capital – that is by firms' entry and exit from single industries – Mill's theoretical consideration of price and quantity adjustments operated by firms already in the market went beyond Smith's generic accounts, and constituted a typical example of Mill's ideological compromise approach to the various schools of thought.

Giving respect to the classical tradition, Mill began his analysis of the concept of value by discussing the distinction between value in use and value in exchange. On this subject, he recalled de Quincey's criticism of Adam Smith's definition of value in use and defined the "teleological value" of a thing as "its capacity to satisfy a desire, or serve a purpose" (ibid., p. 457). As opposed to Smith's (and Ricardo's) value in use, which refers to the qualitative aspects of a

commodity, in *Principles* it crucially acquired a quantitative dimension (albeit an imprecise one), becoming the extreme upper limit to exchange value. Mill's argument is that it is impossible that

> persons will give, to possess a thing, more than the utmost value which they themselves put upon it as a means of gratifying their inclinations.
>
> (Ibid., p. 457)

Thanks to this definition, de Quincey and Mill solve the problem – that according to them exists also in Smith's analysis – of comparability between a commodity's value in exchange and its value in use. However, according to Bharadwaj (1978) they actually also paved the way for definitions of a subjective nature for value in exchange; that is, towards solving the problem in terms of total and marginal utility.

Subsequently, going on specifically to address value in exchange, Mill classifies "all things that are bought and sold" according to their difficulty of attainment (ibid., p. 462), indicated as the determinant of the value of a commodity. Thus, he accepts the subdivision by Bailey of three different classes of products: (1) scarce things, for which the difficulty of attainment consists in an absolute limitation of supply; (2) generic things, for which the obstacle to attainment "consists only in the labour and expense requisite to produce the commodity" (ibid., p. 464); 3) "commodities which can be multiplied to an indefinite extent by labour and expenditure, but not by a fixed amount of labour and expenditure" (ibid., p. 464), for which the difficulty of attainment lies therefore in the increase in production costs, consequent upon the increase in the quantity to be produced (for example, raw materials and agricultural produce).

Mill attributed a proper law of the determination of value to each class of commodities, though in fact he proposed a single overarching theory of value, based on the two definitions of market value (or temporary price), being the result of supply and demand, and natural value (or necessary price), which coincides with cost of production.[2] When compared to the other signaled "corruptions", this unique law of the determination of value is, in fact, a less dramatic innovation with respect to the extant literature. Ricardo himself was well aware of the first-mentioned class of commodities, though he believed that the number of products therein was very limited (the so-called Ricardian exceptions, exemplified in his 1817 *Principles* by rare wines, artworks and antiquities). Most notably, Ricardo maintained that the main social and economic developments of a capitalist society, in terms of competition, accumulation and distribution, depend mainly upon (land and) the second class of commodities, which constitute the vast majority of exchanged products.

One could actually conceive Mill's *Principles* as an attempt to "generalize" Ricardo's theory so as to make it acceptable to its opponents, possibly through the integration of all those elements that Mill did not conceive as expressly incompatible with it. With reference to the same theory of value, de Vivo (1981) signals the descent of the tripartition of commodities from Bailey (1825), an

author who – possibly emphatically – called himself an anti-Ricardian. However, various points in Mill's works created a tension between his treatment and earlier economic literature.

First, Mill states that "things must on the average exchange for one another in the ratio of their cost of production", made up of the sum of wages and profits. He thus ends up developing the line of thought in Smith's works that Ricardo was so strongly against. Far from being a simple definition of cost of production, as in Ricardo, the opinion expressed by Mill is indeed tantamount to stating that both profits and wages, each in an independent manner, influence the value of exchange of commodities. Indeed, when referring to this aspect of Mill's economic theory, Dobb (1973), in agreement with Schumpeter, identifies within the context of price theory a Smith–Mill–Marshall line of thought, which is distinctly opposed to the one that, beginning with Smith and Ricardo, is carried through in the work of Sraffa.

Second, there is a substantial difference between Mill's definition of cost of production and that previously provided by Robert Torrens in his *An Essay on the Production of Wealth* (1821), arguably the most complete treatment of the topic by classical economists. Torrens believes that a definition of cost of production that includes profits is "highly unphilosophical and incorrect", since

> the profit of stock, so far from forming any part of the cost of production, is a surplus remaining after this cost has been completely replaced.
>
> (Ibid., p. 35)

At the bottom of this disagreement we find a different conception of profit, with Torrens holding a view very similar to Sraffa's interpretation of Ricardo, though simplified regarding the profits accruing to the production of capital goods (or intermediate goods) used for the manufacture of commodities. In his analysis of the laws of distribution, Mill (drawing inspiration from Senior, 1836) considers instead profits as the sum of three income components due to the capitalists for their contribution to production and thus independent of the conditions of the exchange: namely remuneration for abstinence, wages of superintendence and compensation for risk. Following this line, profit

> is not exclusively the surplus remaining to the capitalist after he has been compensated for his outlay, but forms, in most cases, no unimportant part of the outlay itself.
>
> (Mill, 1871, p. 481)

However, such departures of Mill's theory of value and distribution from the orthodoxy of Ricardianism do not imply a shift in Mill's pre-analytical vision of the economic system towards a stock exchange-like marketplace where buyers and sellers meet, having quantities supplied and demanded determined independently of the conditions of production and of the laws of distribution. On the contrary, Mill devotes a whole chapter of *Principles* ("On Custom and Competition")

and several remarks throughout the work to stressing that the principles of the determination of value that he sets out are only valid assuming that competition drives the behavior both of sellers and buyers:

> But it would be a great misconception of the actual course of human affairs, to suppose that competition exercises in fact this unlimited sway. I am not speaking of monopolies, either natural or artificial, or of any interferences of authority with the liberty of production or exchange. Such disturbing causes have always been allowed for by political economists. I speak of cases in which there is nothing to restrain competition; no hindrance to it either in the nature of the case or in artificial obstacles; yet in which the result is not determined by competition, but by custom or usage; competition either not taking place at all, or producing its effect in quite a different manner from that which is ordinarily assumed to be natural to it.
>
> (Ibid., p. 239)

Mill principally refers to is the absence of competition among customers; among ordinary people whose behavior, in line with the picture given in the previous chapter, is mostly determined by custom and social institutions rather than by a relentless acquisitive instinct. What Mill had in mind when describing the determination of market price is, as he clearly explained, a market where both sellers and buyers are firms – that is, a representation perfectly compatible with the market-system view of the economic system:

> The wholesale trade, in the great articles of commerce, is really under the dominion of competition. There, the buyers as well as sellers are traders or manufacturers, and their purchases are not influenced by indolence or vulgar finery, nor depend on the smaller motives of personal convenience, but are business transactions. In the wholesale markets therefore it is true as a general proposition, that there are not two prices at one time for the same thing: there is at each time and place a market price, which can be quoted in a price-current. But retail price, the price paid by the actual consumer, seems to feel very slowly and imperfectly the effect of competition; and when competition does exist, it often, instead of lowering prices, merely divides the gains of the high price among a greater number of dealers. Hence it is that, of the price paid by the consumer, so large a proportion is absorbed by the gains of retailers; […] but hitherto [1848] it is only in the great centres of business that retail transactions have been chiefly, or even much, determined, by competition. Elsewhere it rather acts, when it acts at all, as an occasional disturbing influence; the habitual regulator is custom, modified from time to time by notions existing in the minds of purchasers and sellers, of some kind of equity or justice. These observations must be received as a general correction to be applied whenever relevant, whether expressly mentioned or not, to the conclusions contained in the subsequent portions of this treatise.
>
> (Ibid., pp. 242–243)

Thus, Mill's consideration of a negative relation between demand and the market price in fact represents a constraint on firms' willingness and ability to buy more of a commodity, which thus is a means of production. From this point of view, it should be recalled that Mill abandoned the wage-fund doctrine only very late (1869), and he never came to a conclusion about a proper theory to substitute it. Thus, it appears that in *Principles* Mill assumed that firms devote a certain fixed amount of circulating capital to the acquisition of their means of production also in this more general context, and consequently that a rise in the price of one of these commodities will reduce firms' ability to buy them, just as for many decades he had held that a rise in wages would reduce labor demand.

Thus, even Mill's theory of value does not necessarily imply a theory of individual customers as rational – less than all, maximizing – agents. To explain their behavior, in the market as in any other social domain, requires a much richer theory, of the kind illustrated in the previous chapter. However, the theory of value is a good example of how Mill delegated to the science of ethology the study of the specific habits and institutions of a certain time and place, though without sufficiently engaging himself with that science.

Consideration of a wider set of drivers for economic behavior is not entirely absent in *Principles*, but it is not systematically dealt with. In particular, Mill signals two major determinants of economic behavior: custom and competition. In explaining the role of political economy for analyzing these factors, Mill explains:

> Political economists generally, and English political economists above others, have been accustomed […] to exaggerate the effect of competition, and to take into little account the other and conflicting principle. […] This is partly intelligible, if we consider that only through the principle of competition has political economy any pretension to the character of a science. So far as rents, profits, wages, prices, are determined by competition, laws may be assigned for them. Assume competition to be their exclusive regulator, and principles of broad generality and scientific precision may be laid down, according to which they will be regulated. The political economist justly deems this his proper business: and as an abstract or hypothetical science, political economy cannot be required to do, and indeed cannot do, anything more.
>
> (Ibid., p. 239)

Also, more specifically in the case of market behavior, Mill did not take issue with the customs and institutions that he deems "the habitual regulator" of retail markets: these are topics left for ethology, the discipline he always advocated for but never cultivated. This is the reason that Mill essentially ignored retail markets and limited himself to the study of wholesale markets. On one hand, the study of markets where end consumers operate is indeed not fundamental to political economy under the market system vision, where the repetition of the productive cycle depends on capitalists' and firms' decisions, implicitly based on the hypothesis of a known value of final demand. On the other hand, the study

of the national character does not fit into the scope of political economy, and, as explained in Chapter 3, in Mill's view the error rather rests with those who aim at applying its implications directly, without equal allowance for the conclusions of the other social sciences.

On the whole, it appears that Mill's focus on wholesale trade (as mentioned, coupled with the wage-fund theory) may explain many of his innovations for Ricardian analysis. At the same time, the limitation to these markets allows Mill to introduce relevant "corruptions" to classical value theory without corrupting its pre-analytical vision of the economy.

By way of comparison, it is interesting to note that in *Grundriß* Schmoller fills in the gaps he perceived in Mill's "abstract" treatment. He may have produced a rich description of the German national character (and of other nation's characters, in a comparative perspective) and he provided a rather long historical narrative of the evolution of actual markets, including markets of end consumers (an evolution parallel to the development of the communication and transport technologies, as highlighted in Chapter 2). Yet, in the end Schmoller draws similar conclusions to Mill's concerning the theory of final consumers' behavior in the market:

> It was frequently held that only sellers properly compete among themselves. Buyers – by which we mean the customers – compete very little or not at all, because they do not care about each other and specifically not in the sense of opposing the sellers' interests. There is much truth in this, in so far as the seller and the producer normally have a greater interest in the single deal than the buyer, especially the well-to-do customer.
>
> (Schmoller, 1904, p. 47)[3]

However, shortly thereafter Schmoller adds a note of caution that again recalls the idea that with the progress of capitalism individuals grow increasingly rational and self-interested:

> With the sole abstract distinction between sellers and buyers we do not understand the essence of these phenomena. We can only say that often sellers compete more than buyers. But often even customers find themselves in a position to compete strongly – out of necessity or after a strong acquisitive instinct has developed.
>
> (Ibid., p. 48)[4]

Such oscillations, besides a certain tendency to compromise that conjoins Schmoller and Mill, may be explained by Schmoller's consideration of different institutional arrangements of the many markets. To return to the classification of the pre-analytical visions of the market economy, even if one adopts the "market system view," the vision based on routine exchanges and repetition of production rather than the idea of one-off anonymous exchanges, a stock exchange is indeed a stock exchange; that is, a place where buyers and sellers meet to operate

near-instantaneous one-off exchanges. From many points of view, some markets (medieval fairs, for example) objectively work in the way the marketplace view assumes that all markets work.

Before writing *Grundriß* Schmoller had spent several years in the study of single industries or markets, and he was hostile to the idea that a single theory (least of all a model) could be applied to all of them. However, on the whole the theory of customers' behavior is another example of how Schmoller's theory, despite his criticisms of Mill for the abstract and general nature of his theses, do not stand in sharp contrast with Mill's main tenets. Mill came to the conclusion that customers do not fundamentally compete by way of deductive reasoning, on the grounds of his theory of behavior centered on the role of habit and social institutions, and of the observation that the law of one price does not hold in retail markets (hence competition must be absent). Schmoller considered markets in the Middle Ages (when prices were fixed by custom and guilds' rules), modern markets for basic goods and for luxury goods, and the peculiar market of labor, where workers are the sellers and firms the buyers. However, even in this last case he deems the competition among sellers (due to workers' urgent need of a salary) more pressing than the competition among buyers, thus ultimately agreeing with Mill's main tenet.

In a sense, Mill's abstract theorizing in this case (as in many others) stands up to the challenge of being given historical application in Schmoller's hands. The similarity in their theory of behavior is not a necessary consequence of the similarity in their vision of the market economy, because the market-system view does not require a detailed account of individual customers' behavior (as explained concerning Mill's theory of value), and at the same time because the marketplace view does not require individuals' perfect rationality and selfishness to be an unavoidable element (as the vast literature on bounded rationality shows). Thus, how two authors so dissimilar as the British Mill and the German Schmoller came to share the basic elements of both vision of the market and theory of behavior is an issue that deserves further investigation.

Schmoller on class differences

As mentioned above, classes of individuals appear as more uniform and more rational and selfish than individuals themselves, either because these groups exist with the very purpose of safeguarding particular interests or because these individuals are analytically aggregated by the economist on the basis of their sharing common interests. On the other hand, social institutions were shown in the previous chapter to be one of the major determinants of individuals' behavior. While these implications were drawn from a comparison of Schmoller's and Mill's analyses, the two authors differ to some degree in their consideration of classes of individuals within economic analysis.

As discussed in Chapter 3, Schmoller is on the whole more inclined towards defining categories of individuals by induction. As a consequence his practice

allows him to overcome the problem of multidimensionality of human passions and interests by directly observing *ex post* what aspect of human agency, that is which interests and passions, happen to prevail in each case.

This capacity of the historical method to withstand an *ex post* synthesis of conflicting tendencies allows Schmoller to recognize the multidimensionality of social groupings, as well as that of individual identities; for example, in terms of groups defined on the basis of religion existing alongside groups based on gender, race, age or income. Consistent with Schmoller's idealistic stance, these classes are always synthesized in the country's national Spirit:

> [...] smaller or greater complexes will develop, unified by identity or analogy of feelings, interests, ideas, and willing impulses, [...] these social spheres [...] some overlapping into concentric rings, some juxtaposed into eccentric – secant or tangent – rings, [...] they undergo continuous movement and transformation, they represent collective forces, dominating the social, economic, political, literary and religious life.
>
> (Schmoller, 1900, p. 16)[5]

Thus, the same individual is a component of the many parts (circles) of the objective Spirit; he or she has many dimensions, just as the Spirit does. However, Schmoller's methodology implies that only those classifications can legitimately be considered that actually exist either in individuals' consciousness or as physically present in individuals' collective activities. This may imply a reduced set of the possible aggregates with respect to Mill's acceptance of any a priori categorizing hypotheses (provided they are meaningful for the problem at hand), but indeed in his practice Schmoller refers to collective entities possibly in a wider number of contexts than Mill.

In *Grundriß*, we find economic causes for the formation of classes of individuals, such as the division of labor or the division of land property, ethnographic and biological causes (summarized by Schmoller's racial theory of humanity), as well as cultural and social causes, such as individuals' different interests, feelings and ideologies:

> the fundamental causes of the formation of social groups [...] can only be psychological [...] The equality or proximity of interests, feelings and ideas determine the formation of a group.
>
> (Ibid., p. 65)[6]

Notice that by including interests among the psychological variables Schmoller manages to include among the latter also (social) economic dynamics, with the aim to establish the prevalence of Spiritual dynamics over anything else. Due to the existence of an overarching national Spirit that constitutes an aggregate of all the spheres of collective consciousness, social groups are organized within a coherent whole, and they exhibit a hierarchical ordering. The hierarchy of classes emerges from two factors: economic, for example the repartition of

power, goods and income; and psychological, originating in the human attitude to class phenomena and tendency to order them on a value scale, an attitude reinforced by tradition and the subsequent emergence of institutions.

In line with his evolutionary view of society and with his hypothesis on the actual existence of aggregates of individuals, Schmoller conceives of social groups as evolving entities. A convenient example would be social classes, for their interest per se, but also in comparison to Mill's treatment of them, outlined in Chapter 3.

Throughout his economic and historical analysis of Western civilization, Schmoller distinguishes a number of factors tending towards a preservation of class differences, and opposing factors contributing to the merging of classes (or the modification of class structure), as shown in Table 5.1.

Among the conservative forces, that is those contributing to the preservation or an increase of class differences, the most relevant according to Schmoller's analysis are: hereditariness, by which Schmoller implies both purely biological facts and the influence of the family's social environment; the tendency to marry within a same group or class; the impact of characteristics of the natural environment (for example, morphology) on individuals' lifestyle and life conditions; and the hereditary characteristics of professions (due to the presence of barriers to entry established both by selective admission to training and to established traditions and moral norms, especially under a corporative organization of production). In contrast, among the forces tending towards the homogenization of individuals across classes, national Spirit requires no further discussion. The less diffused, though present, possibility of inter-class marriage is considered, as well as the above-mentioned process of diffusion of habits and tastes from the upper to the lower classes, the formation of inter-class public opinion and the development of a national government and of an organized public administration.

The last point is especially typical of Schmoller's vision, as described in Chapter 1. Schmoller conceives the central government as an impartial actor in society:

> […] it is a part of the essential idea of the sovereign power, that it is to be used in the interest of the whole society, not in the special interest of a class.
> (Schmoller, 1914, p. 120)

Table 5.1 The causes of class differences according to Schmoller

Differentiating factors	*Unifying factors*
Hereditary factors	Crossing of blood
Lifestyle	Emulation
Assortative mating	Political authority
Profession	National Spirit

Moreover, in Schmoller's view the existence of a country's general interest is not limited to a sort of compromise between the struggling classes, but it has a material basis in the existence of a number of citizens, namely civil servants and the self-employed, considered by Schmoller as being outside of the class structure:

> [...] jurists, civil officials, military officers, clergy, scholars [...] together with lawyers, physicians, artists, journalists, they constitute a sort of neutral zone, in contrast with the really struggling classes.
>
> (Ibid., p. 123)

This conflict of forces, between those preserving and those blurring class differences, proceeds side by side with the process of class formation and of class struggle that instead is mainly driven by technological and economic factors:

> [...] periods [...] of social conflict [...] always occur if the division of economic or other labor is modified, if new upper classes are formed in the course of technical, intellectual, or other progress. [...] Then there must take place a struggle of classes, not merely of individuals.
>
> (Ibid., p. 127)

In their historical evolution, social classes partly modify their nature. According to Schmoller, in Western societies what were once similar to castes, characterized by insuperable borders with no room for social mobility, tend over time to become more malleable. Class differences remain, but for the most able individuals it is possible to ascend the social ladder. The process originated before the mercantilist period, with the reform of the juridical order abolishing the social structure of "states" (that is, the hereditariness of class belonging) and culminated with the diffusion of increasingly widespread mass education. However, according to Schmoller, the new order could and did eradicate juridical protections, not the qualities of men and their relations of property and wealth. Thus, it is not the social classes that are being abolished, only the barriers between them.

By way of summary, Schmoller considered a number of social aggregates, almost all perceived as part of the actual social reality. They undergo a process of evolution and some are typical of (or emerge at) certain stages of development. Each individual is part of many aggregates, thus belonging is multidimensional. The foundation of aggregates lies in: (1) their being social organs – that is, a collection of individuals coming together for some purpose(s) or to carry out some activity (as, for example, the family); (2) individuals' collective consciousness (as, for example, the national state); or (3) both (as, for example, race, religious sects, and so on). As the case of social class shows, the analysis of the development of aggregates can be autonomous from that of their individual members; however, in many cases the analysis would proceed at both the micro and the macro level (as is the case with the family, for example, discussed in Chapter 7).

The division of labor in the social sciences

Thus, in Mill's analysis social classes act self-interestedly by design, so to say, because the economist aggregates individuals on the basis of their sharing a common interest, or because individuals actually gather for some common purpose. However, there is another reason for the partial approach of considering only rational behavior; namely Mill's procedure by *ceteris paribus* analyses. The recognition of a certain persistency of habitual behavior and of social institutions allows Mill to focus on self-interest not because irrational considerations do not affect economically relevant behavior, but because the behaviors are assumed to stay the same over the period of analysis. In fact, this is the very role that Mill assigns to political economy, within the larger science of social philosophy (or positive sociology).

It is worth recalling here that according to Mill's positivist philosophy, human beings (including economists) have no knowledge of things as they really are: what we know are phenomena and their apparent relation in time and space. A cautious stance is the most reasonable scientific attitude, especially in light of the social determination of our own understanding of phenomena:

> […] every inquirer is either young or old, rich or poor, sickly or healthy, married or unmarried, meditative or active, a poet or a logician, an ancient or a modern, a man or a woman; and if a thinking person, has, in addition, the accidental peculiarities of his individual modes of thought.
>
> (Mill, 1838, p. 90)

Truth, or at least a working degree of confidence, is only accessible through the comparison and combination of all *half-truths* and *partial truths*, while the cultivation of a comprehensive science, encompassing all aspects of human experience simultaneously, is in Mill's opinion beyond human capacity. Hence, within the social sciences distinct sub-disciplines emerge, though with a methodological need for integration and mutual influence due to the very uniqueness of social phenomena (Mill, 1865, pp. 304–309). This integration is beneficial not only for the sake of understanding the real world in its complexity, but also for the intellectual good of the researcher:

> A man's mind is as fatally narrowed, and his feelings towards the great ends of humanity as miserably stunted, by giving all his thoughts to the classification of a few insects or the resolution of a few equations, as to sharpening the points or putting on the heads of pins.
>
> (Ibid., p. 312)

However, throughout his life there is a relevant shift in Mill's opinion on the rationale and scientific program underlying this division of labor in the social sciences. Possibly the clearest statements exemplifying such a shift may be found by comparing Mill's juvenile production with some of his most mature works.

In the 1844 essay Mill justifies the assumption of rationality by invoking a piecemeal approach to the analysis of human society:

> Not that any political economist was ever so absurd as to suppose that mankind are really thus constituted, but because this is the mode in which science must necessarily proceed. When an effect depends upon a concurrence of causes, those causes must be studied one at a time, and their laws separately investigated, […] since the law of the effect is compounded of the laws of all the causes which determine it.
>
> (Mill, 1844, p. 322)

He refers here to what in *Logic* he calls the geometrical method, which consists in "composing" the several causal nexuses of a same phenomenon by first considering each nexus separately. It is assumed that though many causes contribute to the same effect, the impact of each cause is not affected by the working of the other causes. In the same *Logic* Mill explains that the geometrical method is adequate for physics but not for the social sciences, for the very reason that social phenomena violate the mentioned assumption of separability. Both in society and in the individual every phenomenon has many aspects and these are usually mutually interacting, so that: (1) we cannot know if the compound effect can be represented by aggregation of separate hypothetical effects, not even if these single effects are independent of each other and of the contextual conditions from which we abstract; (2) in the individual's consciousness, reality only appears in its entirety, thus the abstraction implied by a separation of the many aspects of a unique phenomenon risks implying a distortion of our understanding of the individual's perception and decision making, and hence of their rationality. In the face of these considerations, Mill in *Logic* proposes a new "reverse inductive" scientific method, in which introspection is a significant source of inspiration for behavioral hypotheses, developing through the spiral of induction and deduction examined in Chapter 3. However, in light of his more general positivist epistemology he warns that even the results obtained by such a method should be considered as partial and should be integrated with the results obtained by other social sciences.

Possibly inspired by his acquaintance with Comte's distinction of the scientific fields of social statics and social dynamics, Mill grew increasingly dissatisfied with his early solution to the theoretical point of how can a *ceteris paribus* analysis provide useful results, even if social reality appears unfit for the method of "composition of causes". Only lately does he appear to have come to a satisfactory solution, by grounding his methodology in a different rationale, namely an explicit ontological hypothesis:

> When an effect depends on several variable conditions, some of which change less, or more slowly, than others, we are often able to determine […] what would be the law of variation of the effect if its changes depended only on some of the conditions, the remainder being supposed constant. The law so found will be sufficiently near the truth for all times and places in which the

> latter set of conditions do not vary greatly, and will be a basis to set out from, when it becomes necessary to allow for the variations of those conditions also.
>
> (Mill, 1865, p. 309)

(Note the striking similarity of wording in the two citations.) The division of scientific labor in the social sciences is thus based on an explicit hypothesis concerning the pace of change of the different spheres of society. It has a clear interpretation in terms of the scheme developed in the previous chapter, summarized in Figure 4.3. The role of political economy emerges as the study of the determinants of individuals' and aggregates' actions – that is, the formation of their will – given (1) individuals' desire, (2) social conditions, and (3) prevailing habits, all of which are assumed to change at a considerably slow pace and can therefore be assumed as constant (in first approximation and for short-run analyses). This study is not only geographically and historically contingent by virtue of its *ceteris paribus* approach, but also requires appropriate integration to understand even a same society, due to the partiality it entails:

> [...] the conclusions of Political Economy will so far fail of being applicable to the explanation or prediction of real events, until they are modified by a correct allowance for the degree of influence exercised by the other cause[s].
>
> (Mill, 1844, p. 323)[7]

The most relevant integrations are provided by: (1) psychology, whose function is the study of the determinants of individuals' desire, as represented by the dashed arrows in Figure 4.3; and (2) ethology, the study of the reverse direction of causation, from human agency to the development of culture and institutions (represented by the dotted arrows). In a sense, these two disciplines study the longer-run historical evolution of a society and therefore provide the basic hypotheses for the economist. As a matter of fact, Mill never personally contributed to the cultivation of these sciences, as already mentioned. From a methodological point of view, it is relevant to note that history, though considered as properly scientific (that is, analyzing causes and consequences) is not identified by Mill as one of the subdisciplines of positive sociology. It is rather the necessary method, proper of all the other social sciences, as noted in Chapter 2.

Along similar lines, Schmoller sees the principle of evolution as one of the cornerstones of political economy. The term "Historische Schule" (historical school) is not intended in the sense that the past is the focus of analysis or a source of interest per se, but rather that every social phenomenon is contingent and unique – namely, it is historical – and so every theory trying to make sense of a social reality (be it in the past, present or future) should be so as well.

As discussed in Chapter 2, in the different German historical schools, traditionally distinguished into an older, a younger and a youngest school, the problem of classification and aggregation of individuals is connected by analogy to that of defining theoretical (ideal) economic phases. Periodization was developed in

several different forms by different authors, and they were concerned with answering different theoretical questions (Schachtschabel, 1971). However, the different forms of periodization have in common a theoretical relation with the issue of individuals' aggregation, not only by analogy, but because individuals' actions and the economic sphere are considered part of a unique historical reality that requires a comprehensive treatment to be understood correctly.

As mentioned, Schmoller supported a multidimensional view of individuals and their actions, as well as a composite view of the national Spirit as being formed by several distinct aspects (the cited *Bewusstseinkreise*). However, he believed that comprehension of a part (a dimension) of human experience is possible without it being necessary to keep referring to the whole. This is evidenced by the relevant role played by economic theory in *Grundriß*, and specifically by Schmoller's choice of defining several periodizations.

Indeed, what Schmoller criticized most in Mill's "hypothetical method" of isolating parts of reality is the lack of historicity. While the previous analysis highlights Mill's political awareness of the problem, his practice – especially in *Principles* – is indeed open to this critique. With examples and applications of his theories ranging from the British colonies to Asian countries or even ancient Middle Eastern economies, Mill certainly appeared to Schmoller to believe that economic theory is of universal validity. However, even to Schmoller the historical and geographical contingency of economic theory does not prevent the economist from formulating isolating theories *tout court*; it only imposes the burden of defining the range of validity – that is, of legitimate application – of each specific piece of theory. This is the major theoretical role played by the definition of socioeconomic periods or stages.

Hence Schmoller's criticism of Mill holding a partial view of man and society can be overcome by Mill's frequent caveat that any analysis of actual social phenomena requires the integration of all the social sciences. However, the difference between the two is not only nominal, i.e. in regard to what should be meant by the label "political economy" and what would be gathered under a different discipline. Mill's insufficient analysis of ethnographic and "ethological" matters actually led him to a worse problem, in Schmoller's view, in that he failed to define the limits of validity of his economic theory.

In his own theory, Schmoller copes with the issue by referring to stages of economic development. By constructing several partial periodizations, Schmoller did not enlarge such a procedure to consider (in some sense) the totality of the Spirit of a period in all its manifold aspects. As Schefold (1996) suggests, such a procedure would have been closer to Schmoller's position in the *Methodenstreit*, and specifically to his reference to the philosopher Dilthey. Schmoller may have considered the investigation of the sociocultural development of society in its fullness to be beyond the reach of the social and economic theory of his time: "in our *Grundriß*, we did not want to venture to such high things" (Schmoller, 1904, p. 665).[8]

In his selection of the aspects of society to be considered by economic analysis he favored the reciprocal influence of moral and political dynamics with economic activity – in particular, the role of legal institutions and power relations – with

respect, for example, to periodizations based on artistic or intellectual life. This is also Schmoller's approach in explaining gender roles, as explained in Chapter 7. It is not exactly clear, however, in what sense the determination of a wider, or better a multidimensional, definition of stages would have been too "high" a task. Obviously, a major cause of Schmoller's prudent stance is the lack of adequate and sufficient historical analyses available to him, a factor he frequently regretted.

On the whole, Schmoller carefully abstained from developing a fully fledged theory of the historical development of human societies because it would have necessarily constituted an ahistorical model (a metahistorical theory) abstractly applicable to the whole of human history, of the kind that Schmoller forcefully rejected.[9]

The difficulty of defining a periodization that can adequately represent and theorize the simultaneous development of the many dimensions of human society may be one of the considerations that prevented Schmoller from defining a theory of abstract economic styles of his own. Under this hypothesis, we may attribute to Schmoller (at least in *Grundriß*) a method that, starting from a certain issue (the analysis of the Spirit of a certain time), would select the subjects of analysis (aggregation on the basis of some parts of the Spirit), proceed to search for regularities that can constitute a realistic theory, then go on to define periods as the boundaries within which that theory is generally valid.

However, as was the case with individuals' classifications, even if designed for the study of different issues, periodizations can in no case be independent from each other, due to the unity of human history, and specifically of the spirit of the time. Moreover, Schmoller held that there is a coherence, an organization, of the different "spheres" of the objective Spirit; hence we should expect the periodizations based on different aspects of the Spirit to lead to results that, if not the same, are mutually consistent.

For example, concerning both class and gender relations, although with differences in pace and through different phases, Schmoller describes similar processes of gradual reduction in social inequalities and of the gradual raising: (1) of the modes of interaction and of struggle towards a civilized standard, with morals and norms regulating the avoidance of violence and of brute dominance in favor of more pacific and democratic processes; and (2) of the sole pursuit of self-interest and low-ranking wants towards the cultivation of the general good and pleasures of a higher order.

In conclusion, Schmoller was more careful than Mill in defining and making explicit the limits of the general applicability of his generalizations. However, he was just as unable to develop a comprehensive study of the overall development of human societies. Although Schmoller did not necessarily agree with Mill's hypothesis on the different velocity of change of the individual spheres of society, he did agree to limit the study of economic laws to the short to middle term; because Mill left such study to different disciplines, while Schmoller believed that the same law can hardly apply to the same object over long time periods, or when many contextual variables change simultaneously.

Part III

On gender diversity

6 Gender diversity as inequality

Gender is a useful example that serves to highlight the advantages of using the concept of diversity within economic analysis. There are a number of reasons for this, as follows.

1 Gender is particularly suited to highlight: (i) the multidimensionality of classifications (for example, interconnections with class, ethnicity, and so on),[1] as well as their instrumentality in studying a certain issue; and (ii) the difference between concepts of diversity and heterogeneity.
2 Gender allows us to avoid the issue of what kind of classification it is (whether actually existent or ad hoc, created by the researcher), since gender was considered by Schmoller and Mill – and all the literature of their time – as a self-evident and existing subdivision of society.
3 The resulting categories are well defined; they do not overlap and the individuals that constitute them do not exhibit any mobility (as the issue of gender non-conformity was neither dealt with in the social sciences, nor in medical literature, until decades after the period covered by the works considered here).
4 The "Women's Question" (*Frauenfrage*) was a relevant political issue during the second half of the nineteenth century, and from many points of view gender mainstreaming and the achievement of equal opportunities for men and women still constitute a major political goal.
5 In the contemporary literature, gender is one of the leading examples of the role of adaptation and false consciousness for a critique of subjective utility theory (see Sen, 2001; Sugden, 2006; Sumner, 2006), and therefore it bears comparison to the theory of behavior discussed in the second part of the work, and particularly Mill's criticisms of Bentham's philosophy.
6 Gender relations have not been totally neglected by economic literature, and feminist economics is a small but relevant stream within economic thought (see, for example, Lee, 2008, and the Introduction to Ferber and Nelson, 2003).

As highlighted by Lewis (1999), there has been relatively little attention within the history of economic thought to gender issues. Starting in the 1990s two strands of literature emerged, one (of the "missing voices of women" school)

attempting to investigate the reasons for the exclusion of women economists from the profession, the other analyzing the exclusion of women from the subject matter of the discipline. Concerning the former, if environmental conditions (such as, for example, their lower education levels) prevented the widespread participation of women in the intellectual debate, certain figures appear to have contributed to the discipline in a significant manner and nonetheless have been almost entirely neglected by their contemporaries as well as by historians of economics. For example, women such as Jane Marcet or Harriet Martineau acted as successful popularizers of economic ideas and they thus heavily influenced public opinion on economic matters.

Closer to our present focus, the literature highlights how Harriet Taylor – Mill's lifelong friend and late wife – contributed significantly to the development of her husband's analyses, but also developed original ideas. For example, as Pujol (2000) summarizes, Taylor was possibly slightly less negative than Mill on the education supplied and the lifestyle imposed upon women. As a consequence of women's ability to carry out supposedly female tasks they acquired a number of skills, such as the capacity to switch between many occupations at short notice, or what we might call multitasking. According to Harriet Taylor this shows that it is habit and training that determines workers' dexterity, not the mechanical nature of tasks, as instead was assumed by Smith when discussing the benefits of the division of labor.

Thus, within the first school of feminist history of economic thought relevant issues to be analyzed are the criteria with which to estimate the worth of a scientific contribution, and the explanation of possible "relevant" (however defined) contributions by women ignored by the subsequent literature.

As mentioned, the other strand of literature deals with the exposition and exploration of masculinist biases in economics (Dimand *et al*., 2004):

> […] women are not the object of a complete neglect, rather they are construed, explicitly or implicitly, as exceptions to the rules developed, as belonging 'elsewhere' than in the economic sphere.
>
> (Pujol, 1992, p. 1)

In her pioneering work, Pujol traces the root of this bias in the origins of the neoclassical school of thought. She distinguishes five reasons responsible of the sexist bias that marginalist economics would have impressed onto the discipline: (1) economics is the most male-dominated social science; (2) it is dominated by one (conservative) paradigm; (3) it only considers exchange relations, excluding non-market activity; (4) in its assumptions it simplifies gender stereotypes ("by assuming the prevalence of the social relations it wants to perpetuate", ibid., p. 3); (5) abstraction and mathematization distances economics from the economic actors; (6) it is androcentric and exhibits a double ideological/apologetic nature – it is bourgeois and patriarchal. Indeed, it may be noted that most of these points apply to other schools of thought as well. Thus, for example Folbre (1993) exposes the bias in Marxist political economy.

Pujol (1992) identifies Smith as the origin of such androcentrism, as in his *Wealth of Nations* he devoted literally one page to household production and to reproduction activities, thus originating the theoretical distinction of a "private sphere" as separate from public life. However, Smith did not neglect gender relations, contributing to the debate in his *Lectures on Jurisprudence* (posthumously published), rather than in his major economic essay.[2] Smith's views should be assessed against previous relevant contributions in the Enlightenment period: at least Locke and Montesquieu should be mentioned here for their impact on the subsequent debate.

As noted by Dimand and Nyland (2003), Locke was aware that in questioning the rights of kings to absolute tyranny he had to ease the fears of those men concerned that he "would weaken political stability, property rights and the authority of the husband and the father" (ibid., p. 4). Thus, while defending liberty and property on the one hand he conceded that men and women were born with equal rights, but on the other hand he produced a secular argument for men's dominance in the family, conceived as a rightful consequence of their greater capacity to produce wealth. He thus paved the way for secular explanations of the oppression of women. A similarly secular approach was taken by Montesquieu who (as mentioned in Chapter 2) devoted his major work to the systematic comparative study of how diverse social patterns emerge from the interaction between human nature (biology) and the social and physical environment. Concerning gender, Montesquieu was still persuaded that women exhibit smaller mental faculties. Yet, he contributed to the development of the study of gender with two significant insights: that many (most?) supposedly natural differences are in fact social; and that differences are natural and thus given, but their social significance is variable.

Smith developed Montesquieu's relativism into an evolutionist approach summarized in a theory of stages. He placed great importance on the idea that the way a population attains material well-being determines gender relations (Nyland, 2003). Unsurprisingly, given our discussion in Chapter 2, Smith's account of the historical evolution of women's status in society corresponds with his theory of economic stages. Accordingly, during the first age, the "age of hunters", women suffered a lower social status due to their lower physical strength, which was an important asset for the process of social provisioning. In the next stage, of pasture, it must have been possible for some families to accumulate wealth (in the form of cattle) and thus gain authority independently of bodily characteristics. However, for the protection of such interests greater discipline and stricter authority must have been impressed upon society by which women's condition further deteriorated.[3] However, through the stages of agriculture and commerce the relevance of bodily strength gradually reduced along with the prominent status of the (male-dominated) army. Thus, he was confident that the development of commerce would improve women's position by increasing their possibilities to secure an income and property of their own.

Smith's main conclusions were that natural differences between men and women are exclusively bodily, in line with his general tenet that education and habit explain the great part of a person's intellectual development. By this time

it was already an unoriginal position. The Enlightenment's optimism regarding the perfectibility of human beings and society focused increasingly on the centrality of education (along with suffrage) as the main policy instruments to redress gender inequality, as advocated among others by Mary Wollstonecraft (who identified education as the origin of women's subjection, as Mill would later) or Nicholas Condorcet.

A crucial turning point was that of the French Revolution. On the one hand, it clearly exposed the conflict of interests among women, specifically between working-class and aristocratic women, as highlighted by Sophie de Condorcet. On the other hand, reprobation for the Terror originated a conservative reaction that heavily influenced the spirit of the time. This is evident not only in Malthus' analysis, in which, due to the inescapable principle of population, gender and class are de facto treated as immutable, if not natural, divisions of society. Even the radical reformer Bentham – extremely liberal in defending individuals' right to seek their happiness however they like, including through practices that prevailing tradition and religion would consider immoral – was cautious in expressing his views on the subject and did not publish most of his notes on sex equality (Cot, 2003; Cot and Pellé, 2010).

The analysis presented here fits into this second stream of literature. It is mostly based on a direct exegesis of Mill's and Schmoller's most relevant works, highlighting those insights of theirs that could only be gained through a gender analysis of the economy, and those patterns of inequality that would have remained hidden to a-gendered investigations.

Evidently, the aim of this analysis is to show through a specific example (gender) that diversity, as distinct from heterogeneity, is a useful concept for economic analysis. However, such an investigation retains some interest in a historical perspective as well, since more often than not the subsequent economic literature ignored gender altogether, ignoring the relevant role that Mill and Schmoller seem to have attributed to it. Indeed, considering the role of women within social analysis, the recent contribution by Folbre (2009) shows how women were mostly neglected in the history of economic thought, apart from very specific considerations. Specifically, Folbre shows that when moral philosophers (among whom economists) specifically dealt with moral evaluations, they applied a double standard, according to which men's desire to attain sexual pleasure and an affluent status has long been (and possibly still is) considered as indirectly conducive to the common good, or has anyway been less criticized than women's similar passions, which were seen as vicious and noxious. Possibly due to its greater moral legitimacy, men's traditional spheres of business were naturally the object of proper economic science. Even in more recent times, as noted by Nelson (2010), the study of gender inequality has been expunged from economic analysis and delegated within the disciplinary division of labor to other social sciences, in particular sociology.

From our point of view, Schmoller's contribution is especially relevant because of his historical insight, through which he traced the development of gender relations as a process of the sexual division of labor, parallel with and

mutually dependent on the social division of labor. Mill's contribution is instead rather limited concerning the analysis of the historical origin of gender inequality, as he was mostly concerned with the definition of a few viable proposals of social and legal reforms.

Both Schmoller and Mill conceived the history of Western civilization as a positive process of human development, distinctly implying a gradual improvement, though neither peaceful nor linear. They tended to highlight the role of class struggle in the process (Schmoller, 1914; Mill, 1871, pp. 10–20; Mill, 1869, pp. 129–139). The overall trend is conceived, in Hobbesian terms, as a process of slow movement away from a state of interpersonal and international relations based solely on the crude rule of violence, to a system where social, economic and political power are gradually substituted for brute force. Beyond this qualitative shift in the factors regulating interpersonal and inter-group relations, a further cause of improvement resides in the modification of the functioning of the process itself: power relations – founded on property relations, social and moral authority, class belonging, and so on – in turn crystallize into law and custom, and therefore the protagonists of these struggles are increasingly bound to observe certain rules of conduct even in a situation of conflict. Within this overall picture, both Mill and Schmoller perceive the condition of women as dependent and impotent, as opposed to their previous state of slavery and brute subjection. Economic factors, such as the development of the division of labor, or individuals' ability to earn an autonomous income and to accumulate wealth, are fundamental forces for this process of development. Cultural and spiritual factors are relevant as well, at least in validating and providing durability to material developments.

Both Mill and Schmoller studied gender relations as a part of political economy, not mainly because the study of household management is one of the historical roots of the discipline, but because the gender divide suggests pertinent patterns of economic inequality and constitutes a fundamental part of the process of social production and reproduction. Indeed, in Schmoller's view, the very emergence of a market economy based on the division of labor is intimately intertwined with the historical development of the structure of the family and the division of labor within it.

The analysis of Mill's and Schmoller's thinking allows us to highlight concrete examples of two major themes discussed in the previous chapters: that social environment and institutions fundamentally shape the context and purpose of individuals' behavior, and that behavior itself frequently takes the form of collective behavior; for example, the family being understood as a place of joint consumption. As a consequence, gender emerges as a relevant form of social embeddedness (in a general sense of interdependence of economic behavior and social institutions, rather than in the specific use of the term by Polanyi, 1944), and therefore as a convenient aspect of diversity. Accordingly, men's and women's behavior will be considered as strongly dependent upon their social roles: in terms of economic and political power, cultural stereotypes, and legal and social constraints.

Both Mill and Schmoller also employ the concept of heterogeneity among men and women; for example, in the form of different muscular strength, and consequently differing suitability for certain occupations. Given our definition of diversity, any reference to natural or innate differences between men and women in fact implies heterogeneity (possibly of a dichotomous form rather than a continuous variable; for example, the ability to give birth).

Besides the interest per se of highlighting patterns and causes of differences and inequality, the analysis of gender diversity also allows us to point out aspects of economic history that would otherwise be excluded from analysis (for example the emergence of the so-called private sphere of social life), and it paves the way for the consideration of an array of individual motives and causes of action, while possibly including instances of collective action.

7 Schmoller on the origin of gender inequality

Schmoller devotes a long chapter of his *Grundriß* to the family economy, a topic by necessity intertwined with that of gender relations. To begin with, he maintains that, regardless of how far back we look into the prehistory of human society, it is impossible to regard man as anything but a gregarious being, living in small tribes at least (20–100 persons).[1] He underlines that, concerning prehistoric times, we cannot assume anything about the existence of families or stable couples made up of a man and a woman. Indeed, by considering ethnographic evidence on non-Western tribal populations, which began to be collected systematically during the second half of the nineteenth century, he maintained that it is likely that people in such communities were distinguished by age cohort rather than by gentes (that is, groups of people related by parental and property ties). On gender roles in these times we know just as little.

At some point, however, parental ties on the mother's side must have begun to be recognized. Indeed, it is plausible that bonding relations of the father to the offspring (and consequently of all the father's branch of the family) were not recognized before the emergence of stable couples and the end of widespread sexual promiscuity. Tribes were then divided and organized into enlarged kinship groups (*Sippen*), formed by the association of several family nuclei connected by consanguinity on the mother's side (*Muttersippen*).

According to Schmoller, at this stage of the *Mutterrecht*, heterosexual affective couples did not live together and their members were not economically related to a relevant degree: even when forming a couple, the man continued living and working with his previous (that is the mother's) kinship, while the woman and their children worked and lived with their mother's.

Schmoller points out that these kinships must have developed and subsequently endured due to a division of labor, which will constitute the pivotal element of all the subsequent societal evolution. For almost all their economic activities, especially production and consumption, the *Muttersippen* were self-dependent units (economic stage of self-production or *Eigenwirtschaft*). By the publication of *Grundriß* it was already an established tradition to assume that at this stage women were mostly employed in the sort of occupations that did not require excessive bodily strength, such as farming or food processing.

Hence, at this early juncture, greater physical power enabled the men in the *Muttersippen* to acquire authority and social power over the women and children of their kinship, although as noted these were neither their wives nor their own offspring (as they were supposed to live with their original *Muttersippe*). Thus, Schmoller does not use the term "matriarchy" to denote a hypothetical stage of women's power over men, but he refers to a period during which descent was traced through maternal lineage, and women and children were located with the mother's family (that is, a form of matrilocality). Such a theory is closer to modern anthropology, which highlights that there are no unambiguous examples of matriarchal societies in the sense of women's power over men. However, as is well known, anthropology has long since abandoned the idea that societies follow a single developmental trajectory, as it is implied by Schmoller. Up to this stage, Schmoller's historical account is indeed very similar to those gaining increasing currency at the time (the two most influential in Germany being August Bebel's 1879 *Woman and Socialism* and Frederick Engels' 1884 *The Origin of the Family, Private Property and the State*). These accounts were distinctively based on a mixture of comparative analysis, drawing from chronicles of long-distance travels and voyagers' diaries, and deductive reasoning, as the assumption that a *Mutterrecht* must have existed until stable partnerships were widespread, for example.

Sexual and social division of labor

A crucial turning point in this system is the introduction of prohibitions of sexual intercourse between members of a same *Muttersippe* (exogamy): according to Schmoller, it led to the practice of exchanges of women and even kidnapping among neighboring kinships, thus confirming and reinforcing women's subordinate status. Women acquired either through violence or barter take on an economic value, and are therefore kept to live and work within their new (their husband's) kinship. Henceforth *Muttersippen* evolve into gentes (*Gentilverfassungen*) – that is, into patriarchal structures – as collective power of men over women was being established, along with the recognition of separate unities (that is families) within each gens, and a hierarchy among men.[2] Interestingly, at this stage any relation between gentes is mostly related to family and patriarchal ties (for example, the exchange of women), while the division of labor is mostly developed only within each gens.

During this new stage, known as the *Vaterrecht* (father's power), the gens emerges as a social organ (in the sense specified in Chapter 3): intermediate in nature, somewhere between a territorial association (like a town) and an extended family. The gens assumes some collective responsibilities, especially what in modern terminology we may refer to as the production of collective goods; for example, the administration of justice and the defense of territory. By doing so, it establishes a new (though very limited) division of labor amongst extended families. At the same time, the enlarged families (including relatives and slaves) become almost self-sufficient producers of private goods:

> The patriarchal family is an institution of custom and law for legitimate procreation and for the management of a joint economy. Working together and producing for the family – under the authority of the father – drinking and eating together, living and entertaining themselves together, is what ties up the wives, children, the serfs, the maids, to the patriarch.
>
> (Schmoller, 1900, p. 244)[3]

What characterizes the division of labor in this (and the previous) stage, both within extended families and between them (that is, within the tribe), is its hierarchical nature: "the most natural division of labor, a division systematically and unitarily directed" (ibid., p. 246).[4] Indeed, in *Grundriß* Schmoller describes two kinds of division: a de-centered one, historically arising from competition and regulated only by market forces; and a power-based (*Herrschäftliche*) one, which exhibits command as the main form of workers' coordination. According to Schmoller capitalist economies simultaneously exhibit both forms of the division of labor, as the latter kind evolved from being the typical form of family organization to constituting the regulating principle of monasteries, the army and – in modern times – of bureaucracy and the public sector in general.

Indeed, Schmoller seems to believe that this hierarchical direction is unavoidable for the organization of complex organs. A similar position, largely skeptical on the prospects of a decentralized organization of production at the microeconomic level, had already been maintained by Say (1845), who affirmed the necessity of an organization of the firm and of the family economy where the entrepreneur and the father, respectively, manage and organize production, and others obey (Forget, 2003b). This position seems to be founded on the opposition between the macroeconomic and microeconomic division of labor; the first efficiently regulated by price movements, the second by command. Indeed, a similar argument can even be found in Mill (1871), who highlights the distinction between simple and complex cooperation, or the macroeconomic and microeconomic division of labor. As Say, Mill believed that cooperative firms, while enjoying the advantage of providing better incentives to workers, face the specific disadvantage of more difficult internal coordination, with respect to firms strictly directed by a manager.

However, Schmoller's treatment of the topic is original not only because he considers the managed organization of the family to be indispensable, but also for its systematic character in terms of a new classification of the kinds of division of labor (centralized and market-based) in his general discussion of the theme (Book 2, Chapter 4), where he notices that a market economy is characterized by both forms (due to the presence of public administration, for example).

In this period, a sort of commodification of women emerges: first, because they are laborers completely dependent on a man (the father, then the husband); and second, because the very passage of control from the father to the husband takes place in the form of a barter or a payment to the father, proportional to his loss of labor force.

However, the husband's power over his wife and children does not follow solely from brute force: while the division of labor implies a mutual dependency of all the members of a community, according to Schmoller, at this stage the specific economic activities carried out by men – particularly home building and the domestication, custody and breeding of cattle – empower them with a disproportionate influence over women, making women disproportionately dependent on men for their survival. This position of material advantage is reversed from that previously held under the *Mutterrecht*, when women's role in agriculture granted them a more stable income than men's aleatory hunting activities (Schmoller, 1900, p. 237). There is, however, a new relevant element in men's new sources of income: the durability of instruments (the productive capital they used) and the possibility to accumulate both tools and products. This durability empowers men with a strictly economic (purchasing) power. Indeed, the relationship between patriarchy and the accumulation of capital is bidirectional, as men's desire to bequest their capital to those who, at this stage, emerge as their legitimate children, increases the saving rate and reinforces the supremacy of the wealthy father's side of the family over the mother's.

The sophistication of economic analysis in this account may be made most evident when compared to an early formulation of what, after a century, was still a widespread point of view:

> […] when his wife and children, as soon as they were able, assisted in this and every other kind of labour; a wife was rather an advantage than otherwise, and therefore she was bought, both as an instrument of propagation, and an assistant in the occupations of life. But as societies were formed, lands and goods appropriated, and women became, perhaps, less industrious, every addition to a family became an additional expence; hence, instead of a man paying a price for his wife, it was necessary he should receive something along with her […]
>
> (Alexander, 1782, p. 274)

Whereas Alexander (as Locke had done) identifies men's and women's productivities as the source of their power (even of their price, in the citation above), Schmoller rejects natural differences as the source of different productivities and highlights the role of social and economic power. Side by side with these material developments, in line with his idealistic approach, Schmoller stresses that the spiritual elements sustain and reinforce the causes of the material process:

> If, then, the gradual process of economic differentiation and the need for a more stable organization within smaller groups are what determined the advent of the patriarchal family, the religious and moral ideas had no smaller part in fixing these new relations into custom and law, and in determining their spiritual character.

> Any progress of education was founded upon the father's authority. The cult of ancestors, religious sacrifices (that only the son could offer to the father), the feeling of responsibility towards the forefathers could only emerge, as could only any other elevate religious system, among peoples whose law was informed to the principle of "prevalence of the father", or *Vaterrecht*. The concept of divinity still today is informed by the representation of a strict father, just towards his sons. Nor is it without relevance to note that anywhere Christianity or Islamism sink in today, the *Mutterrecht* dissolves and a *Vaterrecht* emerges.
>
> (Schmoller, 1900, p. 244)[5]

However, the old extended family entails a dichotomy. On the one hand, it is a closed system of "self" or direct economy (*Eigenwirtschaft*): members of it have little or no systematic economic relation with the members of other families, and it comes to the point of developing its own independent communitarian life; for example, with autonomous religious entities (the ancestors). On the other hand, it originated from and at this stage is still embedded in a gens, and in turn in a population. Gradually, these larger associations embark upon and develop their own economic and political activities, and slowly enlarge the scope of these activities by exploiting an incremental division of labor. Thus, as a consequence of the realization of economies of scale and of the evolution of the political sphere of society, larger social organs slowly acquire many of the economic activities that were formerly conducted solely within the family, leading to the collective production of new public goods and services.

This phenomenon is endogenous: it originates from the progressive division of labor within the economy; that is, within the self-economy of the family itself. The parcelization of tasks and the specialization of occupations slowly allow for the outsourcing of an increasing number of activities, while at the same time enabling some of the family members to free part of their time for the undertaking of activities outside of the family; that is, to specialize in outside or "public" labor, relying on someone else in the family to do the necessary work within the household. The fact that men have the former role and women the latter is almost an accident, originating in men's power of deciding women's occupation, which is made possible not by providence or violence, but by the above-mentioned material and spiritual causes (that is, economic power and religious beliefs).

Interestingly, according to Schmoller, the distinction of social classes (stemming from slavery and the relations of land property) and the internal organization of firms and corporations (based on an imitation of the family's hierarchical division of labor) also arise from the patriarchal family:

> To the division of labor between husband and wife is added the division of labor between sons and daughters, between serfs and maids. Hence, fixed types of domestic occupations emerge in the patriarchal family, distinct jobs that are the germs of the later distinct organizations.
>
> (Ibid., p. 247)[6]

As always applies under division of labor, all the cooperating workers are mutually dependent, so workers outside of the family (men) depend for their well-being and indeed for their survival, on the production of domestic workers (women):

> One needs the other: the economic life of the family on one side; the world of production of goods, of exchanges, of public services and what else belongs to it, on the other.
>
> (Ibid., p. 375)[7]

It is thus clear that, despite their possible evolution into distinct stages, in Schmoller's analysis patriarchy and the capitalist development proceed together. They are but facets of the same phenomenon – that is, the increasing division of labor; of the decentralized market-based kind in the public sphere, and of the hierarchical kind in the private sphere (although the two types of division do not pass through the same stages as they develop). Due to this process,

> […] the division of labor between husband and wife now takes place, not within the family, but between the family economy on the one hand, and the other social organs on the other.
>
> (Ibid., p. 253)[8]

Indeed, the parallel developments of gender relations and capitalist production, as well as the gradual diffusion of the two kinds of division of labor, are relevant examples of the method (commented upon in Chapter 2) of constructing separate periodizations for different issues, thus allowing for a better distinction of endogenous and exogenous processes. In the case of gender, this is indeed a noteworthy improvement by Schmoller over extant literature and in particular over the the theory of stages by Adam Smith who, as summarized in the previous chapter, had proposed a materialist explanation of women's status within each (exogenously given) stage of economic progress, thus making the stages of gender relations coincide with those of economic growth.

Family economy, social economy and women's status

It is relevant to note that weaker bodily strength explains women's proper place in the division of labor only in the very early phases of development, whereas at this intermediate stage it is economic power, reinforced by the spiritual developments (custom and law), that determines men's ability to head the family and to engage in economic and political activities outside the household, thanks to the exploitation of women, serfs, sons and daughters. Hence, with the emergence of the *Vaterrecht*, biological differences are no longer necessary to explain women's lower status. The latter emerges as a path-dependent phenomenon, an inheritance of the past, sustained by the hierarchical organization of the family and specifically men's superior position in this hierarchy at the beginning of the

period. In fact, Schmoller does not explicitly claim that, due to technical progress, natural or innate differences become totally irrelevant. Rather, he does not mention these differences in the description of the subsequent development. However, he clearly holds that, at least for a certain number of activities, unequal power is the actual reason for the sexual pattern in the division of labor:

> A division of labor, systematically directed by the house-head, characterizes the house and its functions. The difference of sex and strength had long since assigned to men hunting, fighting, cattle breeding, and to women the harvest, farming, cooking, fire custody. After the victory of *Vaterrecht*, the husband's power burdened women with other tasks, and he made a slave of her.
>
> (Schmoller, 1900, p. 247)[9]

As new social organs emerge, partly to manage the new economic activities that are no longer dealt with by the family, and partly due to political evolutions, this process leads to the coexistence of two dimensions of social life:

1. the family, acquiring for the first time the role of a "private" sphere, meaning an organ that still undergoes autonomous economic (and emotional) activities, mostly carried out by women as a consequence of their – by now established – position in the preceding division of labor, and with virtually no connection to the outside societal world;
2. the "public" sphere, that is the government and the market, namely the set of all the various socioeconomic and political activities that are no longer under the domain of the family, and that consequently become men's "proper" place of activity.

Since it is clear from this process that the development of the two spheres is a manifestation of the ongoing division of labor, Schmoller easily surmises that the two systems of social and economic organization, completely separated, are still intimately connected, and reciprocally dependent (ibid., p. 244). In Schmoller's scheme, the family is not only a social organ by virtue of the joint activities of consumption, but it is also a producer of goods and services that are socially necessary, even though they are shared within the family and not exchanged with society.

To this process of restriction of the economic scope of the family, Schmoller attaches an initial negative effect on welfare, especially women's (and children's), due to the development of a market economy and of men's acquisitive instinct:

> […] the treatment reserved for all the members of the patriarchal family was tolerable when it used to provide for its own needs. Only when it started working for the market and, by so doing, started to accumulate relevant gains – hence, besides the study to improve the technique, the desire for

> profits and wealth arose – the tendency grew to treat brutally the inferior members of the family, those dependents, the slaves.
>
> (Ibid., p. 246)[10]

The expansion of a market-based division of labor, then, brings about relevant increases in productivity and economic welfare, but does so at the cost of a reduced role for the family, and a worse condition for women. This process is located by Schmoller at the peak of Athens' and Rome's development, and then, after the feudal stage of economic development, as a returning phenomenon with Italy's Renaissance and the rise of the modern national states (ibid., p. 248).

However, after the initial sudden worsening of women's welfare, the process of development actually entails moral and material progress, and it brings about a specifically gradual improvement of women's position. In Schmoller's view, this amelioration takes place due to the reduction of the dimension of families, parallel to the reduction of their economic activities. Indeed, due to the large number of people, workers and activities it had to coordinate, the old extended family by necessity implied property-based and power-based relations (*Herrschaftsverhältnisse*) amongst its members. Unequal power manifested itself from the very constitution of the family, with marriages decided by the families upon the bride's (and groom's) will, or however they were driven by power and economic logic, independently of love.

By contrast, according to Schmoller, the new nuclear family, since it requires less in the way of coordination and management skills, and as the financial stakes are usually smaller than in large extended families, can more aptly be driven by love and affection:

> […] it was in the nature of the domestic community between husband and wife, between parents and children, that always generates intimate and noble feelings of sympathy, that the position of the wife and children, despite the brutal power of the paterfamilias, would slowly improve, and that it would consequently be safeguarded by the law.
>
> (Ibid., p. 245)[11]

Among these improvements, Schmoller specifically mentions improved respect for women, stemming from the moral sanction of monogamy and the greater legal difficulty of repudiation, and from women's greater economic independence, arising from: the dowry – "the price of her purchase", to which she is now entitled (whereas it was previously offered to the father); the *Morgenangabe*, paid to her by the husband (the *Morgenangabe* or dower was a sum settled by the husband on the morning after the first night of marriage to sustain his wife's life in the event that she should survive him); and the value now attached to a number of domestic activities – "among the noblest populations, the domestic arts, of which she was an expert, raised women to a better position in the shared domestic enterprise" (ibid., p. 247).[12]

Not only is the modern nuclear family fit for the cultivation of love and happiness, but it is also more suitable for economic development, with respect to

the older tribal mode of living. Indeed, the family structure induces: (1) more saving and accumulation, due to the bequest motive; (2) a better use of labor, due to the *Herrschäftliche* division of labor; and (3) labor under compulsion, necessary to overcome "the natural indolence" (ibid., p. 373) of underdeveloped peoples.

Thus, Schmoller maintains that the moral reprobation of the capitalist system, still frequent at his time, is founded on accusations that prove to be misguided. For example, Le Play (1864) and (1871) had claimed that due to the market economy parental ties are completely lost; family members spend most of their time separately and independently, and the social concordance granted by the old extended family vanishes. In response, Schmoller emphasizes the advantages and social improvements arising from the division of labor, especially in terms of the material conditions of living for vast strata of the population. In turn, the reduction of poverty would reduce the disorderly behavior attached to it. Schmoller also highlights the moral improvement linked to greater cooperation among the members of an enlarged community beyond family boundaries.

Hence, Schmoller proposes to consider the nuclear family as a sort of ultimate citadel for morality; the frontier that social change, having dissipated the extended family, has reached, but that it should now not breach. The reason is that, according to him, the reduction in the size and responsibilities of the old extended family, with their tyrannical yoke of domestic association, bears positive consequences. According to Schmoller, the dissolution of sympathy linkages among family members is only a problem in the context of broken bonds between husband and wife, or parents and children, and only if new ties, emerging from friendship, proximity, sociability, productive cooperation, do not replace the loosening extended family ties (ibid., p. 251).

Hence, having shown that the division of labor within the nuclear family is necessary to allow productive activity outside of it (the economic argument), and having attached to it a positive role in determining both men's and women's happiness and well-being (the welfare assessment), Schmoller explicitly points to the nuclear family as the moral standard of parental and interpersonal relations. The essence of these developments is that the family, from an agglomeration of authoritative ties, gradually became a moral association, from an institution for production and trade, to an institution for the moral community of life; that by ever reducing its economic purposes, it could increasingly pursue the noblest ideals, and it could become an environment of ever richer content for the cultivation of feelings of sympathy (ibid., p. 252).

The issue of family arrangements is relevant from a gender perspective because Schmoller attributes these positive features specifically to the patriarchal nuclear family. Hence, two aspects of this position should be distinguished. On the one hand, concerning the survival of any form of nuclear family, Schmoller notes that his own theory of the development of the division of labor might imply, in the future, a further process of transferring economic and productive activities (such as care, housework, and the currently unpaid labor) outside of the family, either in the form of a socialization of provision, as the

French socialist and English cooperative writers had suggested,[13] or through the commodification and market provision of these goods and services. However, Schmoller considers such predictions to be unilateral thinking (ibid., p. 254): in his opinion, they do not take into account the fact that individuals are the ultimate cause of social movements, and hence that individuals' purposes, not only their current behavior, matter for identifying future trends. Specifically, Schmoller reminds the reader that he had envisaged the nuclear family as a source of great happiness, and it is therefore unlikely that, solely for a profit motive, people would drastically change their lifestyle in a direction contrary to their felicity.

In his description (ibid., pp. 254–257), Schmoller particularly stresses the point of view of those workers who are employed outside of the home; that is, men. Due to the eventful and laborious modern life, they will especially value the peace, love and leisure of a more intimate side of life, kept separate from the public sphere. Moreover, Schmoller notes: (1) that communitarian social arrangements of what is currently considered to be private, either in the form of a socialization or of marketization, imply the need for greater discipline (and smaller liberty) of these workers – that is, of women; and (2) that weaker family ties and relations imply smaller saving rates due to the reduced bequest motive (ibid., p. 255).

Finally, the most relevant argument in defense of the private provision of many services hinges upon Marx's concept of commodity fetishism. Without citing him, Schmoller notices that the exchange of commodities in fact hides interactions between persons, with the noteworthy difference that the exchanges are not good substitutes for emotional relations. Thus, if subject to commodification many activities would simply lose their value in use:

> […] and now, all the work that millions of people have so far done in the family, for themselves and their relatives, should be converted into mercenary work, done for strangers! No hospital in the world can take the place of a mother's care for her sick child.
>
> (Ibid., p. 256)[14]

This point of view is linked to the second aspect of Schmoller's position: the specifically patriarchal structure of the nuclear family that he aims (and expects) to be preserved in the future. On this point, the rationale of Schmoller's position appears to be less explicit than that regarding the historical analysis of the previous stages of development.

On the one hand, he recognizes the current sexual division of labor to be but a historical inheritance, with no economic underpinning in the current stage of development: physical strength had long since ceased to be considered a real barrier to many, if any occupations. Coherently, Schmoller proposes that all women receive a better (publicly managed) education, in order to be able, if necessary, to be economically independent, for a part or even the whole of their lives (ibid., p. 256).

On the other hand, he deemed women's admission in the labor market as "morally healthier" if it was accompanied by a strict (either customary or legal) sectoral and occupational segregation, with men banned from certain – feminine – occupations, and women similarly abstaining from competing with men in their industries, in order not to depress wages (ibid., p. 257).

In fact, Schmoller explains that work in the market should be sought only by unfortunate single women, with the vast majority focusing on their domestic role. The reason for this proposal is evidently to reinforce and sustain the existing gender roles, helping women, also by means of proper education, to recognize that their unpaid labor in the household is highly necessary and beneficial to society at large:

> It is thus right that all women should be educated to be good mothers, good housewives, as each woman who does not become so, fails her proper function, that in which she does the higher, the elected, the more beneficial activities that she can; and every woman who becomes a bad mother or a bad housekeeper damages the nation, both economically and morally, to more or less the same degree that she might ever improve it, even by becoming the best doctor, the ablest bookkeeper, the wisest businessperson, or whatever she might become.
>
> (Ibid., p. 257)[15]

Schmoller insists on the usefulness of women's housework, and on its instrumentality to men's public work. This argument might explain the persistence of the current sexual division of labor: women's work – regardless of their willingness to undertake it – is useful to men and, from a descriptive point of view, only men's point of view matters, since they have the social power sufficient to enforce their will. However, this explanation might prove dissatisfying from a normative point of view. Here, a return to the hypothesis that, even in modern capitalist societies, natural or immutable differences between men and women have economic and social relevance seems unavoidable.

In fact, Schmoller refers to such a hypothesis only in a short passage, towards the end of the chapter:

> […] the wrong ideal of equality between men and women forgets that any progress of civilization implies greater differentiation and greater mutual dependence of the differentiated parts, that it implies a better combination of different elements; it forgets to show how we can have the functions of giving birth or bearing arms to be undertaken by a man and a woman, respectively.
>
> (Ibid., p. 256)[16]

Crucially, the passage hardly refers to economically fundamental occupations in modern capitalist societies. Rather, it relies on relevant socially necessary tasks, that in fact date back to the previous stages of development and that are assumed to be fixed features of the human experience (including women's lack of fitness to join the army).

A number of hypotheses may explain why this position, at least partly different from that held throughout most of the exposition (apart from that of the very early stage of development), is synthetically reported by Schmoller in a single sentence at the end of the chapter entitled "On the Social Constitution of the Family Economy". On the one hand, it is possible that Schmoller deemed the social relevance of biological differences as immediately self-evident to all his readers and therefore unworthy of lengthy discussion. On the other hand, if we do not want to assume incoherence on Schmoller's side, it must be the case that he did not perceive the two positions to be mutually exclusive. Thus, he may have deemed some occupations as naturally belonging to one of the two sexes, and other occupations to be of an indefinite character. Alternatively, it is possible that in Schmoller's opinion social and natural causes led to the same outcome, or that the latter constitute a constraint upon the former.

A further area of doubt concerns Schmoller's consideration of natural fitness for certain occupations. According to the present reader's interpretation, the unexplained factors that would presumably impede women to join the army – Schmoller's definition of so-called natural differences between men and women – may or may not be limited to physical attributes (such as muscular strength or sexual organs and the capacity to give birth); that is, they may also include psychological and temperamental factors. As discussed in the next chapter, J.S. Mill was particularly hostile to this latter interpretation, and indeed to the possibility of holding any opinion on the subject at all.

8 Mill and the liberal stance

After a period of intense individual crisis during his youth (1826–1827), Mill developed the belief that the moral aim of all human beings should be their individual flourishing; that is, a continued self-cultivation aimed at attaining the highest possible happiness, both in terms of quantity and quality (for an introduction to Mill's thought in the field of ethics, see Priestley, 1969; Dryer, 1969). As discussed in Chapter 4, Mill's concept of happiness is multidimensional and composed of variable, heterogeneous – sometimes incommensurable – interests and passions. Hence, not only are different individuals' levels of happiness not comparable, but even a single person's happiness is difficult to measure quantitatively.

Decisions on the morality of a certain action or social arrangement can only be founded on introspection and sympathy (in Smith's sense, the capability of perceiving and sharing someone else's feelings), coupled with the necessary postulate that one's own happiness should be regarded on the same basis as anyone else's. Such an assessment may sometimes prove contradictory due to the existence of conflicting and incommensurable considerations, and because any proper moral judgment should be concerned with the true meaning of happiness, namely long-term individual and social flourishing.[1] Hence Mill's position, later defined as rule utilitarianism, emerges as the application of the utility principle (the greatest happiness of the greatest number) to institutions and rules of conduct, rather than to single specific acts (Mill, 1861b, pp. 223–226).

This is the point of view that Mill adopts in ascertaining the expediency and legitimacy of inequality, and specifically of gender inequality. As will emerge from the analysis, the criterion is the same one that Mill adopted for the analysis of slavery and "The Negro Question" (Mill, 1850), as well as the Irish situation and colonialism (Mill, 1870). Inequality would be supported or condemned by Mill on the basis of its conduciveness to the greatest happiness of the greatest number of people in comparison to other possible social arrangements:

> I forgo any advantage which could be derived to my argument from the idea of abstract right, as a thing independent of utility. I regard utility as the ultimate appeal on all ethical questions; but it must be utility in the largest sense, grounded on the permanent interests of man as a progressive being.
>
> (Mill, 1859, p. 15)

According to Mill, at least for cultivated persons, the principle of utility is not only a normative standard, but also a spontaneous desire. Indeed, given Mill's definition of happiness, this statement is a tautology: given two forms of pleasure, he defines as "higher" that which is preferred by a cultivated person who is acquainted with both. Since the preference of all educated persons is implied, it may appear that Mill assumes a very small scope for the heterogeneity of feelings among them. In fact, this is not case: rather, different opinions on the ordering of pleasures will lead to moral pluralism among those who accept the procedural validity of rule utilitarianism. Henceforth, pluralism is clearly implied when considering Mill's rejection of Bentham's attempt to define a precise taxonomy of pleasures (see Chapter 4) or Mill's harsh criticisms of conformism and of the rule of public opinion, scattered throughout his many works, but especially stressed in the essay *On Liberty*:

> […] where, not the person's own character, but the traditions or customs of other people are the rule of conduct, there is wanting one of the principal ingredients of human happiness, and quite the chief ingredient of individual and social progress.
>
> (Ibid., p. 63)

However, there are limits to this heterogeneity: a normative limit, represented by the prohibition to use one's freedom to hurt others; and a descriptive one, implying that in fact the cultivated persons of a given society are not as different in their ultimate tastes and purposes as one would suppose. Indeed, by criticizing the "vulgar notion" of happiness – that is contentment and the immediate satisfaction of material sensations – Mill excludes the possibility that these would ever be recognized as superior pleasures by any cultivated person. This sort of uniformity of opinion arises from the long-term history of the development of human civilization – self-cultivation entails a process partly of discovering and recognizing the higher pleasures (which we spontaneously recognize as such), and partly of learning *ex post* to appreciate them:

> If, as is my own belief, the moral feelings are not innate, but acquired, they are not for that reason the less natural. It is natural to man to speak, to reason, to build cities, to cultivate the ground, though these are acquired faculties. […] the moral faculty, if not a part of our nature, is a natural outgrowth from it; capable, like them, in a certain small degree, of springing up spontaneously; and susceptible of being brought by cultivation to a high degree of development.
>
> (Mill, 1861b, p. 230)

As a consequence of this picture of human nature, Mill retains a very negative image of the prevailing behavior of women in his time, and he simultaneously refrains from judging them morally, as he considered that they had no occasion nor opportunity to elevate themselves above what – to a modern reader – appears as something very similar to the textbook representation of the *homo economicus*:

> [As a consequence of] the education given to women – *an education of the sentiments* rather than of the understanding – and the habit inculcated by their whole life, of looking to immediate effects on persons, and not to remote effects on classes of persons, […] I am afraid it must be said, that disinterestedness in the general conduct of life – the devotion of energies to purposes which hold out no promise of private advantages to the family – is very seldom encouraged or supported by women's influence. It is small blame to them that they discourage objects of which they have not *learnt* to see the advantage, and which withdraw their men from them, and from the *interests* of the family.
>
> (Mill, 1869, p. 226, italics added)

There can be no responsibility without freedom of choice, and in Mill's time current gender relations are such that moral judgment is altogether inapplicable to one half of the population (since even a good action does not count as moral behavior if it was not a deliberate choice of the individual). According to Mill, freedom of choice is denied to women by the existing gender relations, specifically by law and custom (as discussed in Chapter 3), and we should not expect moral behavior to emerge spontaneously.

Henceforth, the whole rhetoric of Mill's treatment of the subject is framed in a semantics of "enfranchising" and "granting freedom" to women, including the freedom to fail.[2] Freedom is both an instrumental goal, a precondition necessary to allow a person into the realm of ethics, and also an objective per se, a founding component of happiness, being one of the highest pleasures: "[…] after the primary necessities of food and raiment, freedom is the first and strongest want of human nature" (ibid., p. 242).

However, reformation of society in a direction that would allow women to pursue their higher pleasures is not a choice without cost. Mill is very clear in defining gender relations as a condition of unequal power: men and women are not just different; women are subordinate to men. Men would consequently loose something by granting freedom to women. Pujol (2000) highlights that a similar awareness of a distributive conflict is present in Harriet Taylor's writing. From this awareness Harriet draws the conclusion that it is women who must defend their own interests; this is one of the grounds for Pujol's claim that Taylor held materialist and socialist views more distinctively radical than Mill's.

According to Mill, cultivated men should nonetheless consider women's emancipation as a social improvement since they would relinquish unjust power in exchange for someone's happiness (indeed, that of many), and they should not weigh their own interests higher than that of others. Furthermore, Mill argues that a condition of perfect equality also increases men's happiness, since women's low morality (as implied by their selfishness) is a dead weight against men's flourishing: "Whoever has a wife and children has given hostages to Mrs. Grundy" (ibid., p. 229).[3] Indeed, while not free to act upon their desires, women are able to exert a certain influence on their husbands by way of three channels: by exploiting their mutual affection; by acting so as to make common life

unpleasant; or by seducing them. Thus, as a consequence of women's unjust power over them, men exhibit a tendency toward selfishness and a lack of interest for the common good greater than that they would display otherwise.

Such a situation would be addressed not only by women's greater cultivation, but also by their enlarged liberty, which would necessarily precipitate a reduction in their desire to influence their husbands' behavior:

> […] the love of power and the love of liberty are in eternal antagonism […] an active and energetic mind, if denied liberty, will seek for power […] where liberty cannot be hoped for, and power can, power becomes the grand object of human desire. Hence also women's passion for personal beauty, and dress and display; and all the evils that flow from it, in the way of mischievous luxury and social immorality.
>
> (Ibid., p. 238)

These considerations constitute the basic ground for the primary instrument proposed by Mill to address gender imbalances: education – especially greater education for women, equal to that provided to men. Only by enabling women to cultivate the higher pleasures can society allow for their flourishing, and correspondingly hold them accountable for their behavior.

As it emerged from the discussion on the theory of behavior (Chapter 4), a crucial part of the process of learning, according to Mill, is not only formal education of the youth, but also the complex set of norms and influences to which the individual is subjected to by their social environment. The subject of the influence and limits of public opinion is very relevant to Mill's concept of liberty, and he devoted a large part of the Introduction to *On Liberty* to proclaim the right to individual privacy: not in the narrow sense of informational privacy, but in its fuller meaning of the ability to determine one's life without restraint from law or social reprobation:

> Society can and does execute its own mandates: […] it practices a social tyranny more formidable than many kinds of political oppression, since […] it leaves fewer means of escape, penetrating much more deeply into the details of life, and enslaving the soul itself. Protection, therefore, against the tyranny of the magistrate is not enough: there needs protection also against the tyranny of the prevailing opinion and feeling; against the tendency of society to impose, by other means than civil penalties, its own ideas and practices as rules of conduct.
>
> (Mill, 1859, p. 9)

By contrast, informational privacy is here almost overlooked: the case for gender equality and women's freedom requires that the family not be considered by the social scientist as an inviolable black box, because intra-household dynamics determine to a large extent men's and women's ability to participate equally in "public" social life. Indeed, both Schmoller and Mill discuss the

"private" subject of the internal organization of families at length, because they believe this topic to be of an eminently political nature (Morales, 2007). As discussed above, the idea that the sexual division of labor at home is a private sphere of life, shielded from the rest of society (and from opinion), emerges only as a consequence of the gendered division of labor. Furthermore, if we accept Schmoller's theory that households' organization is systematically based on hierarchy, then it concerns power relations between classes of people, rather than contractual arrangements between individuals. However, that same approach by Schmoller shows that thinking through family organization does not necessarily mean criticizing it, but rather admitting that it is not the only possible configuration.

Next to enlarged liberty, Mill lists two further moral and economic benefits for society as a whole – that is, including men – to be gained from establishing a system of perfect equality between men and women:

1 better education, and the example of mutual respect and just equality that would be provided to children, the family being "the first school of behavior" (Mill, 1859, p. 170 ff.);
2 a doubling of "the mass of mental faculties" available for the higher tasks of humanity (both by employing women's current faculties, and by improving them by means of increased education).

The latter argument explicitly refers to the positive impact of a sudden increase in women's labor supply: "the [economic] loss to the world, by refusing to make use of one half of the whole quantity of talent it possesses, is extremely serious" (ibid., p. 211).[4] Mill explains this position in terms of the beneficial effect that would accrue from increased competition: it would benefit society at large due to "the benefit of the stimulus that would be given to the intellect of men by the competition; or (to use a more true expression) by the necessity that would be imposed on them of deserving precedency before they could expect to obtain it." (ibid., p. 221). Hence, besides a better and cheaper deal for consumers (ibid., p. 184), increased competition implies greater incentives to innovation and a more efficient allocation of resources (also by substituting some able women for those men holding undeserved positions).

However, this argument seems to contradict Mill's other position, implying that in ideal world that most married women would not work. Both in *The Subjection of Women* (1869, p. 179) and in the later editions of the *Principles of Political Economy* (1865 and 1871, both editions published after Harriet Taylor's death) Mill claims that the liberty to access any occupation, if desired, would empower married women with sufficient bargaining power at home, without them actually having to work. Further, the increase in labor supply may lead to a generalized reduction of wages (according to the wage fund doctrine), with consequent ambiguous welfare implications.

As Forget (2003a) argues, the question is, however, to be understood as a matter of timing and gradual implementation of policy. According to Mill, in the medium to long term a new economic system would emerge based on

widespread cooperative production units, where both women and men would acquire greater liberty and equality than under the current managerial capitalism. In Mill's view, this is not a Utopia but a scientific prediction:

> […] when, however, co-operative societies shall have sufficiently multiplied, it is not probable that any but the least valuable work-people will any longer consent to work all their lives for wages merely. […] Eventually, and in perhaps a less remote future than may be supposed, we may, through the co-operative principle, see our way to a change in society.
>
> (Mill, 1871, p. 793)

Meanwhile, the question is of mere expediency of alternative temporary social arrangements, until the full transition takes place.

This interpretation is confirmed by Mill's discussion in the chapter "Of Wages" in *Principles*, where he observes that economic independence is one of the main channels through which gender equality can be reached: "the *power* of earning is essential to the dignity of a woman, if she has not independent property." (Mill, 1869, p. 179, original italics). Moreover, in the chapter "On the Probable Futurity of the Laboring Classes", the issue is solved on strictly economic terms, as Mill argues that the increased independence of women, following employment in the market, would reduce population growth, with a positive counterbalancing effect on labor supply and wages (Mill, 1871, p. 765).

There remain two hypotheses then, to explain Mill's ambivalence on the desirability of married women's employment, expressed in *The Subjection of Women*: the first is that the current imbalance of power, originated in law and custom, cannot be addressed only by women's increased power of earning. If this is the case, working outside the home would not absolve a woman from having to work at home as well (the issue now termed "the double burden"):

> […] in an unjust state of things, her doing so […] enables him still farther to abuse his power, by forcing her to work, and leaving the support of the family to her exertions, while he spends most of his time in drinking and idleness.
>
> (Mill, 1869, p. 179)

Such a situation, beyond worsening women's well-being, produces the further social cost of preventing women from carrying out domestic activities in a proper way, with negative consequences, for instance, for the education of children.

The second hypothesis, not necessarily alternative to the first, is that the political and pragmatic aim of *The Subjection of Women* may have induced Mill to adopt there a prudent stance and a gradualist approach in order to reach a compromise on point of policy, at least with moderate conservatives. Indeed, for his positions in *The Subjection of Women* (less radical than those expressed in the

essay "On the Enfranchisement of Women", written at a younger age) Mill was perceived as a moderate, and sometimes even a conservative, by part of the English feminist movement of his time (Caine, 1994). This hypothesis might be confirmed by the frequent qualifications (towards a less restricted view) to the general statements on the inexpedience of married women's work, as for example concerning the way it should be enforced:

> [...] but the utmost latitude ought to exist for the adaption of general rules to individual suitabilities; [...] these things, if once opinion were rightly directed on the subject, might with perfect safety be left to be regulated by opinion, without any interference of law.
>
> (Ibid., pp. 179–180)

While it would be unwise to expect the total absence of any contradictory statements throughout such a vast literary production – and one that spans so many years of intellectual development – as Mill's, it could be argued that a certain degree of eclecticism is implied by Mill's urgency for an agreement on viable political reforms (as discussed in Chapter 2). It is particularly so in the case of a topic so controversial by the time to induce even Bentham to a moderate and cautious stance (Cot, 2003).

However, this consideration does not apply to the analysis of the causes of gender inequality: while being open to a compromise on points of policy, Mill firmly rejects the theoretical foundations of his opponents, according to which biological differences matter even in a modern capitalist society. As opposed to some interpretations (for example by Pujol, 1992) according to which Harriet Taylor should be regarded as the radical partner of a rather moderate Mill, this is another example of how the debate on gender inequality should definitely be regarded as multidimensional and defiant of straightforward classifications of "conservative" as opposed to "radical" writers (Forget, 2003a). As shown in the next section, Mill only recognized the existence of bodily differences and he attached relevance to these only when considering fitness for certain – very specific – occupations.

8.1 On the "nature" of gender diversity

Mill wrote a whole essay – posthumously published – on the rhetorical use of references to nature when dealing with man and society (Mill, 1874). In a nutshell, he denies scientific standing to the expression "law of nature", unless the implied meaning of both words is explicitly clarified in each instance. In fact, both terms bear relevant ambiguities: "law" might denote either a prescription (for example, antitrust law) or a description (for example, gravity law), while "nature" either includes the sum total of all the possible generalizations made by induction (that is, the world as it appears to us), or excludes those phenomena that are deemed to be of human origin (thus opposing natural phenomena to artificial or man-made ones).

According to Mill, as was the case with Bentham's ambiguous use of the term "self-interest" (Chapter 4), the adoption of an expression that is open to two or more interpretations should be avoided for a number of reasons: first, it may often imply either a false description (confusing what it is with what the writer would prefer it to be) or an unjustified prescription (forcing a positive assessment on the current situation, without providing arguments for it); or second, it may be interpreted in a too extensive (or an altogether wrong) sense.[5]

Yet Mill made extensive use of the terms "natural", "naturally", and so on, and it could prove useful to investigate this usage in relation to gender roles. Mill's careful attention to the precision of all concepts and definitions, due to their role in defining a field of play for discussion and possibly agreement, calls for the exclusion of any accusations of sloppiness on Mill's side (as have been implied by Schumpeter, 1954, p. 528). Rather, while denying on rational grounds any a priori moral standing to the – supposedly natural – origin of a phenomenon, Mill recognizes nonetheless that the attribute carries a great rhetorical weight, on grounds of feelings and irrational considerations, and that this power can be employed by its supporters as well as its opponents:

> If this notion of imitating the ways of Providence as manifested in Nature, is seldom expressed plainly and downrightly as a maxim of general application, it also is seldom directly contradicted. Those who find it on their path, prefer to turn the obstacle rather than to attack it [...] They therefore, for the most part, rather endeavour to show, that they have as much right to the religious argument as their opponents, and that if the course they recommend seems to conflict with some part of the ways of Providence, there is some other part with which it agrees better than what is contended for on the other side. In this mode of dealing with the great *à priori* fallacies, the progress of improvement clears away particular errors, while the causes of errors are still left standing [...] yet by a long series of such partial victories, precedents are accumulated, to which an appeal may be made [...]
>
> (Mill, 1874, p. 383)

This is the strategy adopted by Mill in the first chapter of *The Subjection of Women*, when he briefly sketches the history of Western civilization as a gradual spontaneous improvement of moral and civic customs, largely aided by Christianity, in order to represent women's subjection as a clashing isolated relic of the past, contrasting with the Christian doctrine of universal solidarity and love. Throughout the essay, he incidentally refers to "natural propensities" (whether of men, women, or human beings in general), albeit – as it appears – as a concession to the colloquial use of the term (whereby natural is a synonym of usual or characteristic), rather than due to a theoretical hypothesis on the biological origin of gender differences.

Then, from the second chapter onwards, Mill proceeds with the major strategy mentioned in the citation, of questioning "the great fallacy" – that is, the

idea of founding social institutions and policies on the example supposedly offered by nature. The critique evolves as follows:

1 first, given the then current advancement of science, Mill denies that human nature can be known to anyone;
2 he then claims that the scant evidence available would rather suggest the temporary adoption of the other hypothesis – of the social origin of inequality;
3 finally, he denies that the real nature of men and women, even assuming that it could be known, would matter for policy design.

Mill believes the opposite point of view, of the natural origin of gender differences, to be the major argument against his position for full equality of the sexes. For this reason, Mill devotes many pages (for example Mill, 1869, pp. 141–150, 190, 203, 212) to forcefully deny that, until the sciences of ethology and psychology make significant progress, anything can be said on the subject:

> […] so true is it that unnatural generally means only uncustomary, and that everything which is usual appears natural. The subjection of women to men being a universal custom, any departure from it quite naturally appears unnatural.
>
> (Ibid., p. 138)

In fact, Mill is skeptical of the prospect of science ever acquiring such knowledge, even in the future, due to the insurmountable impossibility of applying induction to the subject (as mentioned in Chapter 3, Mill recognizes induction as the ultimate source of knowledge):

> […] standing on the ground of common sense and the constitution of the human mind, I deny that anyone knows, or can know, the nature of the two sexes, as long as they have only been seen in their present relation to one another. If men had ever been found in society without women, or women without men, or if there had been a society of men and women in which the women were not under the control of the men, something might have been positively known about the mental and moral differences which may be inherent in the nature of each.
>
> (Ibid., p. 148)

The problem is greater than the usual difficulty to use induction in any other department of the social sciences: whereas usually the issue is only that too many variables change simultaneously, thus preventing the possibility of Bacon's *experimentum crucis*, in this case two variables – sex, the natural difference, and gender, the social difference – always move together through history, so that the effect of one cannot be disentangled from that of the other.[6] Comte, in his private correspondence with Mill, had suggested that he study phrenology, to

find in the study of the physiology of the brain the source of information he was looking for (Forget, 2003a).[7] Mill replied that he was unconvinced of the development of the specific discipline, but also of the epistemological method it implies:

> [...] however great and apparently ineradicable the moral and intellectual differences between men and women might be, the evidence of there being natural differences could only be negative. Those only could be inferred to be natural which could not possibly be artificial, the residuum, after deducting every characteristic of either sex which can admit of being explained from education or external circumstances. The profoundest knowledge of the laws of the formation of character is indispensable to entitle anyone to affirm even that there is any difference, much more what the difference is, between the two sexes considered as moral and rational beings; and since no one, as yet, has that knowledge, [...] no one is thus far entitled to any positive opinion on the subject. Conjectures are all that can at present be made.
>
> (Mill, 1869, p. 150)

According to Mill, as long as any doubt on the subject remains, the methodologically and morally sound approach to the issue is that, in order to recognize social reforms as possible, science should proceed with a presumption in favor of the social origin of inequality:

> [...] we cannot isolate a human being from the circumstances of his condition, so as to ascertain experimentally what he would have been by nature; but we can consider what he is, and what his circumstances have been, and whether the one would have been capable of producing the other.
>
> (Ibid., p. 203)

From a methodological point of view, this approach suffers from the same objective limitations of the process of induction (mentioned above) as discussed by Mill in his *Logic*. However, there are good reasons for this favorable presumption: (1) not to hinder utility-improving social reforms on the basis of uncertain evidence; (2) the existence of a number of social factors whose role in affecting character, in Mill's opinion, had instead been firmly proved (see Chapter 4).

Using this approach, Mill endeavored to show – as far as a hypothesis that cannot be tested can show – that the scant available evidence is more favorable to the working hypothesis that most, if not all, the observed differences between men and women are in fact of social origin. Reference to this position may be found, for example, in the recurring botanical metaphor (of Kantian origin and typical of the Enlightenment) of a growing tree for the human character (see for example citation on page 79).

On the basis of his theory of behavior, Mill points out three social causes that conspire to determine gender roles and gender inequality: coercion, social education, and self-education.

The first factor is founded in the legal system, at that time placing limitations on women's capacity to generate income, on their property rights and freedom to employ their resources as they liked (especially married women), and on their autonomy from their husbands:

> […] the wife is the actual bond servant of her husband: no less so, as far as legal obligation goes, than slaves commonly so called. […] She can do no act whatever but by his permission, at least tacit. She can acquire no property but for him; […] In the immense majority of cases there is no settlement: and the absorption of all rights, all property, as well as all freedom of action, is complete. […] He can claim from her and enforce the lowest degradation of a human being, that of being made the instrument of an animal function contrary to her inclinations.
>
> (Ibid., p. 161)

In Britain by 1869, the year of publication of *The Subjection of Women*, the legal subordination of women, especially married women, was indeed striking. To offer some examples, British women had fewer grounds for separation than men until 1923; until the Married Women's Property Acts of 1870 and 1882, the husband controlled the whole of the family's property, including his wife's; the crime of rape was not recognized as possible in wedlock, as the wife's consent was always presumed by courts; and wives lacked many dimensions of legal personhood, including the right to vote.

The metaphor of slavery (already used by Bentham), as well as his interest in the issue of domestic violence in his parliamentary activity, highlights Mill's tenet that laws and institutions, since they apply equally to everyone, must consider and be adapted to the worst-case scenario of a person who would make nefarious use of them, not to the good person who, having an unjust power, decides not to use it (ibid., p. 163). In fact, some advancements in the legal condition of women were due to (good) men themselves. For example, Mill relates the institution of settlements and other contracts that aimed at preserving a portion of financial resources (especially those inherited) for the exclusive benefit of the wife, as an attempt on the part of fathers (not husbands) to preserve the well-being of their daughters even after marriage (although such contracts in Mill's time were very limited in scope and financial scale).

The next factor determining women's subjection is what might be called *social education*. It includes all customs, social norms and public opinion that bind women to act in a certain manner and not another. Although they do not receive the sanction of law, and their enforcement is not based on the administration of justice, they still prove to be a power irresistible to the individual woman: "[…] what is now called the nature of women is an eminently artificial

thing: the result of forced repression in some directions, unnatural stimulation in others" (ibid., p. 148). As mentioned, in Mill's opinion, the role of education is of primary importance:

> Men do not want solely the obedience of women, they want their sentiments. All men, except the most brutish, desire to have, in the woman most nearly connected with them, not a forced slave but a willing one, not a slave merely, but a favourite. They have therefore put everything in practice to enslave their minds. The masters of all other slaves rely, for maintaining obedience, on fear; either fear of themselves, or religious fears. The masters of women wanted more than simple obedience, and they turned the whole force of education to effect their purpose.
>
> (Ibid., p. 141)

Mill remarks that all women are taught from the very earliest years that the ideal character they should aim for is the opposite of men's (and of what in his view is required for individual moral flourishing): not autonomy and self-control, but submission; not to cultivate themselves, but only to care for others, and specifically only for those that they are supposed to care for – their husbands and children.

Besides education, public opinion also carries significant weight. This impact on gender inequality is intertwined with three elements: the biological attraction of the opposite sexes; the wife's complete dependence on her husband; and the social environment, making social consideration and esteem ("the principal object of human pursuit", ibid., p. 141) obtainable by women only through their husbands' public life. The role of the social milieu, here termed the social education of women, is pervasive:

> If it had been made the object of the life of every young plebeian to find personal favour in the eyes of some patrician […]; if domestication with him, and a share of his personal affections, had been held out as the prize which they all should look out for, the most gifted and aspiring being able to reckon on the most desirable prizes; and if, when this prize had been obtained, they had been shut out by a wall of brass from all interests not centring in him, all feelings and desires but those which he shared or inculcated; would not serfs and seigneurs, plebeians and patricians, have been as broadly distinguished at this day as men and women are? and would not all but a thinker here and there, have believed the distinction to be a fundamental and unalterable fact in human nature?
>
> (Ibid., pp. 141–142)

Indeed, when considering public opinion, women themselves have a share of responsibility in preserving their subordination. On the one hand, they are the most passionate defenders of decency and respectability, including the respect for traditional gender roles, because that is the source of their own social consideration. On the other hand, through a process of sedimentation of habits, and

of adaptation of desires and expectations (see Chapter 4), women reinforce the social norm with their own opinions: "was there ever any domination which did not appear natural to those who possessed it? […] It hardly seemed less so to the class held in subjection" (ibid., p. 137). This process, that may be termed *self-education*, reinforces and corroborates social education.

However, Mill did not assume that all differences between men and women necessarily exist due to perverse social institutions (ibid., p. 232). Rather, he focused on highlighting and denouncing the presence of these perverse dynamics. Indeed, a liberal stance does not require more information to prescribe an appropriate policy:

> […] among all the lessons which men require for carrying on the struggle against the inevitable imperfections of their lot on earth, there is no lesson which they more need, than not to add to the evils which nature inflicts, by their jealous and prejudiced restrictions on one another.
>
> (Ibid., p. 242)

As mentioned above, according to Mill no knowledge of natural or a priori differences is necessary for policy making because, once artificial and human-made obstacles are removed, it rests on experience to show what (if any) further difference from men women exhibit. It is not clear, this scenario being unforeseeably far in the future, what the appropriate policy would be, for Mill, in the face of such residual natural differences (an exception being the labor market; see below).

From the methodological premises and the main results of his analysis, it necessarily follows, as demonstrated in the next chapter, that Mill's policy proposals should focus on the removal of the social, economic, political and cultural factors that prevent women from competing in the market on equal grounds with men, and from fully and actively participating in social and political life.

9 The state, the market, and gender

To summarize, a main feature of Schmoller's analysis of the family economy is his belief that at the microeconomic level a decentralized division of labor is often inefficient, or even impossible in the case of large-scale production. So it is by necessity that families and firms are hierarchically organized. The market is an efficient macroeconomic coordination device of the many hierarchically organized productive units, and the development of the division of labor brings about relevant beneficial improvements in the material conditions of living for the vast majority of the population. However, the market cannot always provide certain products and services of good enough quality, and it cannot substitute for all interpersonal and social interactions. In particular, it cannot supply emotional content or substitute for intimate and affective relations, these being aspects of human existence that the economist cannot completely disregard, as economic analysis also requires reference to individuals' purposes.

Thus, according to Schmoller, it is necessary for an economic analysis narrowly focused on market forces and the acquisitive instinct (such as the those of the British classical economists, which he forcefully criticized) to predict a further development of the division of labor, leading to the socialization of all the productive activities still carried out within households, and thus nullifying the family economy. However, such a prediction would be empirically valid only if men were singlemindedly unidimensional, and did not value anything but the consumption of goods and services: a hypothesis clearly rejected by Schmoller. Indeed, he believed that the nuclear family constitutes a source of great happiness for all its members, while history shows that modification of the structure of the family leads to a worsening of the status of women due to increased exploitation arising from men's greed. Hence, Schmoller deems any further developments of this kind to be both unlikely and unwise.

Finally, although – as was the case for the market – the state cannot provide the feelings and happiness that only family ties grant, it can and should manage the provision of a number of public goods, including mass education, thus contributing positively to social welfare.

Such a complex picture defies oversimplified assessments. In particular, the historical investigations outlined in the previous section and in the introduction to this chapter show that it may be helpful to distinguish between two aspects of

an economic analysis of patriarchy. On the one hand, gender inequality has social consequences, and it is an object of welfare analysis as well as a normative evaluation; on the other hand, its relation to the market, and more generally the roots of its emergence, can be descriptively analyzed.

For his position in favor of women's subordinate position in the family and of their very limited access to the labor market, Schmoller might be considered as favoring patriarchy, substantially opposing socialist and feminist demands for equality. He directly confronts and criticizes these positions in *Grundriß*, paragraph 92: "Gegenwart und Zukunft der Familie: Frauenfrage" ("On the future of the family: the women's question"). Instead, concerning the relation of gender inequality to the market economy, Schmoller holds a position roughly opposed to the centuries-long tradition that separated the analysis of the sexual division of labor (supposedly ordered by nature) from the social division of labor (driven by the profit motive) that considered the two subjects as belonging to different disciplines.

We are then in a position to consider a table, similar to that proposed by Hirschman (1982), with the difference that it does not purport to represent the historical development of the debate, but rather constitutes a way of visually classifying – in static terms – the different positions within the debate. By considering the welfare dimension of patriarchy on one axis, and its relation to the market on the other, an ordering emerges as displayed in Table 9.1 below:[1]

The upper row of the Table, which groups together all those who saw a contradiction between the market and traditional gender roles, which may be split into two columns, as it is in the table proposed by Hirschman. Accordingly, it shows a very intuitive dichotomy among the wider group of writers who think that the expansion of the market economy is incompatible with the permanence of privilege or other power positions (possibly apart from the unequal distribution of wealth and income). Accordingly, one could assign writers who condemn patriarchy and tend to perceive capitalism as a power able to fight – and possibly dismiss – this blamed inequality to the right-hand column of the upper row of Table 9.1. This position is but a specification of the *doux commerce* philosophy, applied to the case of gender inequality. By contrast, those may be assigned to the left-hand column who appreciate the order and morality of pre-capitalist societies, but who believe these to be incompatible with the new economic system and thus susceptible to be wiped out by it. Many among them would include the issue of "proper" relations between the two sexes among these vanishing institutions. As Hirschman showed, this category, labeled as the

Table 9.1 A classification of economic analyses of patriarchy and the market

		Welfare impact	
		Beneficial	*Negative*
Relation to the market	*Conflicting*	Self-destruction	*Doux commerce*
	Peaceful	Comparative advantage	Exploitation

self-destruction thesis, in fact comprises a heterogeneous collection of arguments to explain the supposed predominance of market forces (ibid., pp. 1466–1470).

What these two approaches have in common is the belief that a market economy constitutes a social organization that maximizes profit without any regard for other social institutions. Hence, to assume that unequal gender roles will similarly be removed by the expansion of the market implies the belief that patriarchy is contrary to, or at least void of, economic rationality.

By contrast, the lower row of Table 9.1 considers those views that depict the market and patriarchy as either compatible, mutually dependent and reinforcing, or even as aspects of the same process. These standpoints can also be divided into two groups, according to their normative assessment of gender inequality: on the left-hand column of the row, I have included those who perceive the expansion of the market and the parallel preservation or reinforcing of patriarchy as a spontaneous and substantially positive phenomenon; on the right-hand column are those who criticize patriarchy while identifying it as instrumental to capitalism.[2]

Both positions locate the connection between patriarchy and the market in the division of labor and its acquiring a definite gendered pattern: authors' views differ in the definition of the ultimate causes of this division. For example, as it emerges from the analysis of Schmoller's thought, to affirm the legitimacy of gender inequality (if not grounded on a metaphysical truth) it is necessary to identify not only innate or natural differences between men and women, but also a relevant impact of these differences on productivity and the ability to undertake certain occupations (the *comparative advantage* argument). By contrast, those who criticize the current sexual division of labor are compelled to identify unjust sources of men's power within social institutions and organizations (the *exploitation* argument, though not necessarily denying the existence of natural differences, as discussed in Mill's case).

It is convenient to read the table as classifying theoretical and political positions, not single contributions: indeed, writers frequently maintain more than one of the positions classified above, possibly for rhetorical purposes or depending on the social context being analyzed. In Schmoller's case, he refers to nature and biology as applying to the late *Mutterrecht* stage, when a sexual division of labor first emerged within large and otherwise homogeneous tribes, and possibly to the late stage of the contemporary nuclear family. However, in all the intermediate passages, his historical account is based on the social organization of the division of labor, in a fashion that, although not necessarily implying Smith's theory that interpersonal differences emerge from – rather than being the cause of – the division of labor, it does not rely on the existence of innate differences as a necessary hypothesis.

It is evident that the proposed classification cannot provide an interpretation for the analysis of all the economic issues related to gender relations, but it might prove useful to uncover some apparent puzzles. For instance, grossly simplifying the respective positions, such a passionate critic of patriarchy as Mill and such a prudent defender of it as Schmoller did agree on a number of policy proposals. For example, they underlined the moral and economic need for improved education of women, as well as approving of gender segregation in the labor market.

Concerning the latter, both were worried that a sudden dramatic increase of women's labor supply might depress wages, and consequently they suggest (Schmoller more forcefully than Mill) that some degree of gender occupational segregation might reduce the impact of women underbidding men.

Similarly, although arriving at their judgments from opposing points of view, neither Mill nor Schmoller attached a negative overall judgment to the role of the market economy with respect to the definition of gender roles. Indeed, Schmoller held that the process of specialization and division of labor depends upon and reinforces the rightful traditional sexual division of labor, while Mill maintained that the two phenomena are incompatible, and that market forces (if they are allowed to operate freely) will spontaneously lead to an efficient – that is, independent of gender – allocation of laborers and resources.

It would appear that the table allows for a further classification of political stances: those of an interventionist kind, implying theories that entail a positive role for political authority, on the main diagonal, as opposed to non-interventionist stances, in the top-right and bottom-left cells. In this latter case, a positive judgment on the role of the market is found, whether in preserving or removing gender inequality, and any evils of the concrete historical conditions are – in principle – attributed to an insufficient development of it, or to limitations of free competition in the market (due to state or other interference). By contrast, in the former case, criticisms of the historical conditions are based on arguments that the market is operating too well.

These two positions tend to imply, in general, a presumption in favor of respectively gender-neutral and gender-specific social and economic legislation. Accordingly, for example, neither Mill nor Schmoller believed that specific laws were necessary to regulate women's employment, either in the form of positive actions or as prohibitions (apart from employment conditions, concerning for example safety at work, which nonetheless applies to both men and women). Evidently, their opposing views had to diverge when it came to predicting what the outcome of free competition would be, should unequal power relations and other social and cultural barriers to the market be removed. The major difference between the two, from this point of view, is that Mill was ready to accept any outcome of free competition (which he did not attempt to predict *ex ante*), because the result would be legitimized by the (market) process through which it was attained. By contrast, Schmoller accepted such a process because, as mentioned above, he believed that market forces would have preserved the morally correct gender roles.

In conclusion, the classification proposed aims at showing that the economic analysis of gender inequality entails more dimensions of analysis than a simple classification of conservative as opposed to progressive writers. Thus, it should not come as a surprise to find that as early as 1900 (first edition of the *Grundriß*), Schmoller had already invoked a policy measure that during the late twentieth century has been put forward by so-called progressive forces; that is, active policy making for the conciliation of women's and men's private and public working lives. At the same time, the analysis of Schmoller's approach to gender

diversity highlights that such conciliation policies ultimately aim at preserving the established gender roles by lessening the "double burden" on women. As such, they may be considered even to be contrary to the aim of rebalancing unpaid work burdens and modifying power relations (Todorova, 2009).

Schmoller's policy proposals

In an important discussion (Schmoller, 1900, pp. 250–252), Schmoller notes that – at least concerning gender roles and family ties – the moral corruption attributed by his contemporaries to capitalism itself should in fact be attributed to its lack of proper organization and management. In keeping with his general interventionist stance (see Chapter 2) Schmoller suggests that regulation and active policy is the appropriate solution. Specifically, Schmoller notices that what is needed is greater liberty and flexibility on the families' side, as well as a proper public policy aimed at allowing all family members to conduct their public lives without damaging their ability to fulfill their domestic duties. It is noteworthy that this includes the preservation of men's personal involvement in family life, which should not be impeded by their participation in the public sphere of society.

Specifically, Schmoller suggests that work organization, firms' organization, legislation, and urban and regional planning should be defined so as to allow for the conciliation of family and working times, which implies geographical proximity of residential and working areas:

> The whole local distribution of living quarters, of working places, of schools, etc., the whole distribution of timings, all the regulations that firms and the other organizations set up for themselves, should be properly coordinated, they should form a harmonic whole, if we want society to flourish, and that firms and families do not suffer from it."
>
> (Ibid., p. 251)[3]

This proposal from Schmoller is noteworthy for two reasons. On the one hand, it once again defines the market not as a self-organizing device that spontaneously emerges independently of society, but as a complex interlinking of social institutions requiring appropriate management, whose development should be efficiently regulated by the policy-maker. On the other hand, specifically concerning gender inequality, the proposal recognizes a place for policies to address the negative social consequences of the sexual division of labor.

When considered in the light of the similar proposal to accommodate for some deviations from the traditional division – as, for instance, with the demand for better education to support single women's employment – Schmoller may appear to hold two judgments on gender inequality, depending on the source of inequality being considered, and lending legitimacy to those policy interventions aimed at removing the inequalities that have no foundation in nature but rather arise only from social institutions. A further possible indication of such a position is the ambiguity in Schmoller's assessment of the process of removal of the corporative

limitations to women's employment (ibid., p. 253). In fact, Schmoller does not criticize this development in principle, but only for the specific way it was managed, lacking any sort of gender occupational segregation. As discussed above, this position is due to the fear of a negative impact on (men's) wages, rather than being founded on a moral condemnation of women's employment.

Ultimately, such a position would not be far from Mill's, with a basic difference resting on the assumed social and economic relevance of the biological differences between the sexes.

Mill's policy proposals

As noted in the previous chapter, Mill's discourse for the rebalancing of gender relations is centered on the advocacy for freedom of choice and opinion for both men and women. The eradication of all legal bounds, especially concerning marriage and family law, is the most immediate instrument. For instance, while avoiding a thorough discussion on divorce, Mill refers to the possibility of separation (Mill, 1869, p. 179) as a minimum requirement: if women are to be slaves, they should at least be able to choose their master.[4] To legal equality, Mill adds three main policy proposals, more relevant for political economy (Mill, 1869, p. 217):

1 more and better education, equal for men and women;
2 greater access and participation in political debate and the decision-making process;
3 "fair" competition – that is, free and unimpeded by other social institutions, amongst adults sharing approximately the same opportunities.

Interestingly, these are the same proposals that Mill put forward for the amelioration of the condition of the laboring classes, in *Principles*. Thus Schmoller and Mill agree in depicting not only men's and women's happiness as mutually dependent, but women's and workers' well-being as specifically mutually dependent.

As Mill explains, both in *The Subjection of Women* and in *Principles*, the point is to set up an environment in which everyone can defend his or her own interests, because each knows better what he or she prefers. Mill's objective might thus be represented as (1) a refusal of paternalism and any other attempt to prescribe policies on women's or laborers' behalf, and (2) aiming at the social empowerment of the weak.

Education is the main instrument of this goal, as repeatedly noted: "the prospect for the future depends on the degree in which they can be made rational beings" (Mill, 1871, p. 763). Besides its relevance for moral advancement, improved education for both men and women is also deemed instrumental to reduce domestic violence and brutality, to diffuse a taste for the higher pleasures and the feelings of sympathy and solidarity, and to slow down population growth, thus increasing wages and the material well-being of the greatest part of

the population. Moreover, education should be equal for men and women, not only in quantity but also in the specific curriculum being taught: this is a fundamental requirement, in order to grant an equal starting point to all adults.

A constituent part of education, as well as an activity for which a certain degree of cultivation is required, is the participation in public political debate. This is clearly represented by Mill as a necessary measure, if people are actively to take care of their interests. In his opinion, the public press (especially the Penny Press), the institutions for lectures and discussion, the debates within trade unions and the collective deliberation on questions of common interest are essential features of workers' participation (ibid., p. 763). For women, access to the press is similarly invoked, as well as inclusion in the governance of social organs and of the country. Evidently in their case a preliminary further requirement is necessary, namely the right to suffrage:

> to have a voice in choosing those by whom one is to be governed, is a means of self-protection due to everyone: women require the suffrage, as their guarantee of just and equal consideration.
>
> (Mill, 1869, p. 184)

Interestingly, from the citation above it emerges that Mill supports women's right to vote, not only due to his liberal stance, but also for the auxiliary argument that in the eyes of public opinion equal treatment is conducive to equal dignity. Hence a long-term positive impact on culture and attitudes is among the reasons for extending suffrage: this argument is one of the many instances of the rule utilitarian approach, according to which Mill does not refer to human and civil rights as a value per se, but requires that each time their advocacy be rationally documented in terms of the expected consequences of a certain reform.

According to Mill, prejudice toward gender roles is as essentially injurious as legal barriers are. As is well known, he was the first English member of Parliament proposing a bill to extend suffrage to women. In his time, the argument was very controversial. Women's right to vote was even opposed by the utilitarian James Mill (in his *Essay on Government*) who theoretically should have held a rationalist and consequentialist point of view. "Reasons for the exclusion: none", as Bentham will comment (Bentham, 1828, cited by Cot, 2003, p. 182). As Peart (2009) suggests, it appears from a survey of satirical comics of the time (where Mill was depicted in a feminine manner) that Mill might have failed to be re-elected due to his active involvement in this issue.

In Mill's view, women – positively interdicted from most occupations, and coldly tolerated in those that are allowed to them – faced a very hostile economic environment, far from the fair competition advocated by the classical economists. These limitations were injurious to women as well as to all the potential beneficiaries of their work (Mill, 1869, p. 144).

Mill believed that the tendency in the future would be for a move toward a society where the right to privacy – and correspondingly to deviations from the social norm – is increasingly less respected, despite the effort of liberal intellectuals

to convince society to respect individuals. Against the trend, in *The Subjection of Women*, he developed the argument in two directions. On the one hand, cultural and social limitations to individuals' freedom (especially to women's freedom to abandon the traditional gender role of dependent housewife) are superfluous and could easily be substituted by the general application of the principle of competition:

> […] what women by nature cannot do, it is quite superfluous to forbid them from doing. What they can do, but not so well as the men who are their competitors, competition suffices to exclude them from.
>
> (Ibid., 154)

> […] freedom and competition suffice to make blacksmiths strong-armed men, because the weak armed can earn more by engaging in occupations for which they are more fit.
>
> (Ibid., p. 144)

The second argument is consideration for a potential heterogeneity among men and women, in clear opposition to the – presumed – uniformity (within each gender) mandated by fixed gender roles:

> […] if some such presumptions exist, no such presumption is infallible. Even if it be well grounded in a majority of cases, which it is very likely not to be, there will be a minority of exceptional cases in which it does not hold: and in those it is both an injustice to the individuals, and a detriment to society, to place barriers in the way of their using their faculties for their own benefit and for that of others.
>
> (Ibid. p. 144)

Competition is a principle fundamentally linking the prospects of improvement and well-being for women and for the working class. In terms of the classification in Table 9.1, Mill's position is one of the paradigmatic examples of the *doux commerce* thesis applied to gender inequality. He identifies the root of most social ills (from this point of view) as being not in the excesses of the market economy, but in its still incomplete advent:

> I conceive that, even in the present state of society and industry, every restriction of it [competition] is an evil, and every extension of it, even if for the time injuriously affecting some class of labourers, is always an ultimate good. To be protected against competition is to be protected in idleness, in mental dulness; to be saved the necessity of being as active and as intelligent as other people; and if it is also to be protected against being underbid for employment by a less highly paid class of labourers, this is only where old custom, or local and partial monopoly, has placed some particular class of artisans in a privileged position […] The time has come when the interest of universal improvement is no longer promoted by prolonging the privileges of a few.
>
> (Mill, 1871, pp. 795–796)

However, Mill is not thinking of the kind of market economy hinted at by Say and described by Schmoller, featuring a decentralized division of labor among competing productive units, and a hierarchical division of labor within them. Both within firms and families, Mill believes that cooperation, and relations involving not dependence but mutual interdependence, will progressively substitute the current pattern. Mill conceives cooperatives and partnerships between capitalists and workers as a necessary stage of economic development, due to the increasing level of education among workers:

> […] notwithstanding the effect which improved intelligence in the working classes, together with just laws, may have in altering the distribution of the produce to their advantage, I cannot think that they will be permanently contented with the condition of labouring for wages as their ultimate state.
>
> (Ibid., p. 766)

He especially lauds the moral implications of workers' cooperatives, echoing the moral improvements he envisaged in fairer family relations, as emerges from a comparison of the two extracts below:

> It is scarcely possible to rate too highly this material benefit [of the diffusion of cooperatives], which is yet nothing compared with the moral revolution in society that would accompany it: the healing of the standing feud between capital and labour; the transformation of human life, from a conflict of classes struggling for opposite interests, to a friendly rivalry in the pursuit of a good common to all; the elevation of the dignity of labor; a new sense of security and independence in the labouring class; and the conversion of each human being's daily occupation into a school of the social sympathies and the practical intelligence.
>
> (Mill, 1871, p. 792)

> The equality of married persons before the law, is not only the sole mode in which that particular relation can be made consistent with justice to both sides, and conducive to the happiness of both, but it is the only means of rendering the daily life of mankind, in any high sense, a school of moral cultivation. […] the only school of genuine moral sentiment is society between equals. […] The moral education of mankind has hitherto emanated chiefly from the law of force, and is adapted almost solely to the relations which force creates. […] Existing moralities, accordingly, are mainly fitted to a relation of command and obedience. Yet command and obedience are but unfortunate necessities of human life: society in equality is its normal state.
>
> (Mill, 1869, p. 173)

The diffusion of workers' cooperatives would improve women's condition in the labor market, "assuming of course that both sexes participate equally in the

rights and in the government of the association" (ibid., p. 794), and consequently it would improve women's economic independence and social respect.

However, it is only when marriage also evolves into a similar relationship of peers that gender equality might be deemed complete. Interestingly, Mill explains this point of view with the same rhetorical device of comparing the organization of families and firms:

> It is not true that in all voluntary associations between two people, one of them must be absolute master: still less that the law must determine which of them it shall be. The most frequent case of voluntary association, next to marriage, is partnership in business: and it is not found or thought necessary to enact that in every partnership, one partner shall have entire control over the concern, and the other shall be bound to obey his orders. [...] The natural arrangement is a division of powers between the two; [...] the division neither can nor should be pre-established by the law, since it must depend on individual capacities and suitabilities. [...] The division of rights would naturally follow the division of duties and functions.
>
> (Ibid., p. 169)

Corporations then become an example to show the possibility of establishing interpersonal relations on equal terms, and marriage is compared to shareholding. However, according to Mill, the process towards a more equitable division of tasks and power is of a less spontaneous nature than it is in the case of workers' cooperatives.[5]

Law and custom combine to keep women in a subordinate position, having far less power than men both in society and in the family, this imbalance being even greater than that between workers and capitalists. For this reason, any social reform must be based on legal reform and the three pillars of education, free competition, and participation in the political debate.

Instead, only a part of this process was ongoing at the time Mill was writing – that is, the improvement of women's education, even with negative implications:

> [...] the great amount of unhappiness even now produced by a feeling of a wasted life. The case will be even more frequent, as increased cultivation creates a greater disproportion between the ideas and faculties of women, and the scope which society allows to their activity.
>
> (Mill, 1869, p. 222)

An active policy is required due to men's inability to recognize their own interest (which would include gender equality). Hence, as in Mill's case, our definition of "non-interventionist" stances should correctly be understood not as the policy-makers' disregard of gender issues, expecting undefined market forces automatically to cope with the issue. Rather, Mill, along with the classical

economists, considered the market itself to be a man-made social institution, and he expected competition to lead to efficient outcomes only after policy-makers had created the requisite conditions. In other words, policy would contribute to the development of a well-functioning market economy, characterized by not only free but fair competition (see Chapter 1); a context in which all adults (regardless of gender) can compete on an equal footing.

Part IV

An application

Gender diversity in the labor market

10 Gender, diversity and heterogeneity in the labor market

The preceding analyses allow us to come to some preliminary conclusions as to the analytical methods most suited to deal with diversity, specifically concerning the choice of units of analysis, the implied theory of behavior (see Part II), and the origin of and viable policy proposals to cope with gender inequality (Part III). The aim of Part IV is to apply the methodology suggested by the preceding analyses to show the feasibility and expedience of a thorough consideration of gender diversity within economics, while at the same time testing the relevance of gender, in particular, as an analytical category and of the policies touched upon in Part III. Indeed, besides its main aim of providing an example of the application in economics of the concept of diversity, this section contributes to the debate on gender employment differentials by using the specific and high territorial heterogeneity exhibited by Italy's regions as an internationally relevant case study. It emerges that an analysis aware of gender inequality and territorial heterogeneity will tend to make available additional information that may prove useful for policy making.

This part of the work will consider the relevant case of Italy's labor market, especially from the point of view of men's and women's employment.[1] While the division of labor, or rather both the sexual and the occupational divisions of labor, have been highlighted as the main source and manifestation of power imbalances between men and women, it is necessary to focus on one aspect in order to keep the argument clear. Moreover, a partial view such as that focused only on employment status is sufficient to underline the usefulness of the consideration of diversity within economics. The choice of the labor market is determined by it being a crucial source of power inequality in contemporary Western societies and by the aim to reconnect with the bulk of contemporary economic literature on gender issues. Furthermore, as explained below, Italy's case is particularly relevant as it exhibits some of the greatest gender imbalances among OECD (Organization for Economic Cooperation and Development) countries, especially in the labor market.

Specifically, the particular example of employment patterns in Italy is suited to our aim of showing the relevance of diversity, for a number of reasons:

1 Employment and the ability to earn an autonomous income have been highlighted in Chapter 8 as a major determinant of (women's) empowerment.

2 There exists an extensive literature aimed at explaining the origins of gender gaps in the labor market, though with a certain emphasis on heterogeneity between women and men.
3 Europe's labor markets exhibit relevant gender differentials in terms of employment, unemployment, activity rates, and labor incomes.
4 Among these, Italy's labor market exhibits even greater gender differentials than the EU-27 average. For instance, the current women's employment rate is the second lowest after Malta, and after Italy failed to reach many of the objectives set by the European Union in the Lisbon Agenda (especially in terms of women's employment) there are grounds to expect that it will fail to reach some of the objectives set by the Europe 2020 road map as well.
5 Due to late (and possibly incomplete) national political and cultural unification, Italy's regions exhibit dramatic differences in the socioeconomic and political-cultural environments, greater than those in most other European countries. Thus, they provide ideal conditions to test the relevance of the impact of local environment on individuals' outcomes, which is one of the distinctive features of the theory of behavior discussed in Chapter 4.

This section aims to apply and possibly validate, by means of this specific case study, a number of distinct tenets put forward in the preceding two parts of the book. On the one hand, among the main theoretical and methodological results of the historical investigation carried out in Part II, it was claimed:

1 That a specific consideration of systematic differences between groups of individuals arising from their different social role and position (diversity), rather than the traditional assumption of individual differences of preferences and/or constraints, can lead to the investigation of subjects that would otherwise be necessarily expunged from the field of economics despite their holding economic relevance.
2 That, especially for applied analyses, economics may profit from the use of methods and the study of themes that the process of separation and specialization of the social sciences has so far delegated to other social disciplines.

On the other hand, among the conclusions of Part III, it became clear that gender may be a relevant economic categorization of individuals, transverse to many other categories, and that the social significance of biological differences between men and women (that are perhaps only partially known) depends greatly on the economic organization and institutions involved. The following specific themes seem central to the analyses of the writers considered:

1 The role of the sexual division of labor – within the household, in terms of housework and caring activities, and outside of it, in terms of occupational segregation.
2 The role of public policies, especially those facilitating the conciliation of private and public working lives.

3 The relevance of unfair competition, or what we may today call discrimination.
4 The role of law, customs, and gender roles.

Finally, and consequently, a few policies were deemed central: (1) more and better education for all, especially for those who lack power (that is to say women); (2) greater and more equal participation in public life and in political debate; (3) fair competition, properly realized through public intervention in and regulation of the economy.

As mentioned, the two methodological proposals, together with the four analytical issues and the three policy strategies, will be considered here with specific reference to employment. Gender differentials are found to be significant in many other areas of Italy's labor market (see Bettio and Verashchagina, 2009; Cipollone *et al*., 2006), such as short-term and long-term unemployment rates, gross salaries, the return to education, incidence of part-time and temporary contracts and participation in life-long learning and training activities. However, the large number of factors considered here as relevant determinants of behavior (habit, social institutions, public opinion, etc.) prevents the analysis of too many issues simultaneously. I will focus on the individual probability of being employed by developing a unique dataset of individual and regional observations for selected years in the period between the 1970s and the 2000s. Men and women will be analyzed separately, in order to highlight the very different determinants of their employment status, but joint estimations will be reported for the sake of comparison.

The statistical method adopted here – multilevel modeling – is convenient to represent formally the multifaceted theory of behavior discursively analyzed in Chapter 4. Accordingly, employment status will not be interpreted as the result of individuals' free and rational choice, but as the outcome of a mixture of both individual and social determinants.

With the aim of examining the determinants of gender differentials in employment, I will tend to interpret as forms of heterogeneity those differences that are clearly quantitative differences of outcome, supposedly arising from the same process (for example, aging) that can in no doubt be considered as independent from society. The paradigmatic example of how even gender may be treated as a form of heterogeneity, within applied economics, is the use of additive or interaction dummy variables, assuming the value 1 if the individual is a woman, 0 if a man. Such an approach fundamentally assumes that employment is the result of a very similar process for both men and women, apart from a parametric difference. Here, it will be contrasted with its opposite; that is, the use of gender-specific estimates that instead allow men and women's employment status to be determined independently, possibly as a function of totally different variables.

I will relate this latter approach to the concept of diversity; while adopting the same model for men and women for the sake of comparison, from the analysis it will emerge that the determinants of employment status for the two genders are clearly different. As it will turn out, a number of variables only affects one of the two, while some even have opposite effects on men and women. As a

consequence, it makes a big difference both in terms of theoretical models and policy implications to define men and women's employment as heterogeneous – that is, as the result of a same process of choice – or diverse –that is, crucially affected by context and family variables in a society where the context is different for men and women.[2] The determinants of employment taken into consideration to explain the social origin of these differences clearly hinge upon the historical analysis of Part III. They include variables related to unpaid labor and the domestic economy, as well as educational attainment at the individual level. At the regional level, they try to proxy gender-based discrimination (Mill's unfair competition), the provision of social assistance services (Schmoller's policies for conciliation), and measures of gender segregation in the labor market and macroeconomic conditions. Cultural influences and stereotypes are proxied by a number of variables, summarized by means of factor analysis.

I will try to argue that the approach based on diversity proves superior to that based on heterogeneity in predicting employment statuses. Such an analysis has two objectives from the empirical point of view. On the one hand, to criticize the mainstream literature by showing the existence of significant interactions between the micro and macro levels. Consequently the estimates developed here should be regarded as superior to those developed within single-level models (that is, models that only consider either micro or macro variables and consequently exhibit missing variable(s) biases). On the other hand, it allows us to estimate the relative weight of individual and macro variables in determining women's employment in Italy at different historical times. By so doing I propose a coherent history of the secular increase of women's employment in Italy.

In the next chapter I will provide a brief general overview of recent historical trends in Italy's labor market for men and women, and will summarize the economic literature on the determinants of men and women's employment and on the sources of difference between the two genders. In Chapter 12 I will review the seemingly disjointed applied literature, developing a multivariate analysis of Italy's regional institutions in order to obtain a few synthetic indicators of the socioeconomic milieu. I will then formalize the argument and develop the econometric model to be estimated. Finally, in Chapter 13 I will make the central hypotheses more explicit and present the main results.

11 How gender may help in understanding the labor market

Gender gaps in pay, unemployment, employment and activity rates, as well as vertical and horizontal gender segregation, are remarkable features of the labor markets of all industrialized countries. Indeed, they characterize the economic structure so much that a satisfactory understanding of labor markets cannot be reached without also conducting gender analysis. For example, in most EU-27 countries further increases of employment and activity rates can hardly be reached without a substantially greater inclusion in the labor market of women, especially older and younger women.

As explained in the previous chapter I will focus on Italy as a relevant case study. In Italy gender has historically been a variable even more significant in determining individuals' employment status than in most other OECD countries. As shown in Figure 11.1, during the last few decades women's employment rate (ER) in Italy has tended to increase, while men's has exhibited a moderate

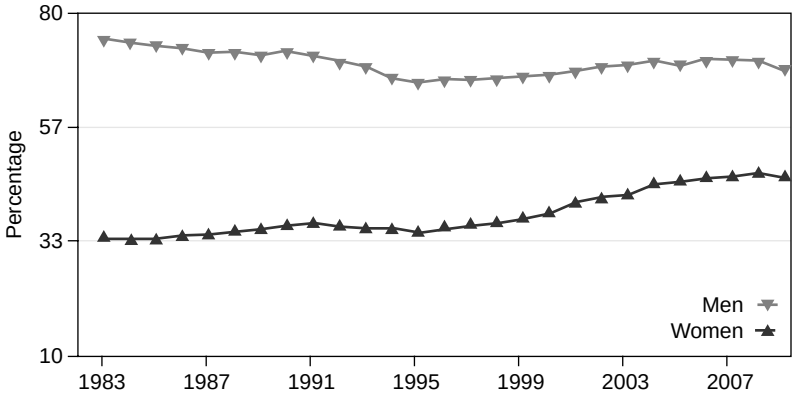


Figure 11.1 Long-term evolution of employment rates (source: ISTAT, Labor Force Survey (LFS), various years).

Note
The series exhibits a structural break in the year 1990 due to the adoption of a different sampling design and estimation method by ISTAT, the national statistical office. Observations after 1990 imply values slightly higher that those obtained under the previous methodology; thus the two periods, 1975–1989 and 1990–2009, should not be compared directly.

reduction. In the most recent years men's ER has been higher than women's by almost a half, and this is due to a particularly low women's employment rate, the second lowest in the EU-27 after Malta.

Due to many factors (possibly including late industrialization and the dominant cultural authority of the Catholic Church, among others), this phenomenon may to some extent be connected back to the issues of conciliation raised by Schmoller. Thus, as remarked upon in the *Report on Equality Between Men and Women 2009*, Italy in 2005 exhibited the second highest difference in the EU between the time spent in unpaid domestic labor by women and men (European Commission, 2009). Also the issues of cultural barriers and lack of power, raised by Mill's analysis, are particularly relevant to Italy. The same report highlights that in 2007 Italy exhibited the second lowest percentage of women members of the highest decision-making bodies of its publicly listed companies (again, ranking with Malta, and as of 2010 the situation has not significantly improved).

Before analyzing the salience of any insights that may be drawn from the two Mill's and Shmoller's analyses, it may be useful briefly to highlight the relevance of regional divergence in Italy's labor market. By aggregating the 20 Italian regions into three more homogeneous geographical areas (North, Center and South), as shown in Figure 11.2, it emerges that both men's and women's employment rates are substantially higher in the North, the richest macro-area, including regions among the top in Europe in terms of per capita income, labor productivity and employment rates.[1] By contrast, the South (or *Mezzogiorno*) is well known to be among the least developed areas in Western Europe, traditionally a major recipient of the European Union's finance for development (European Social Fund and

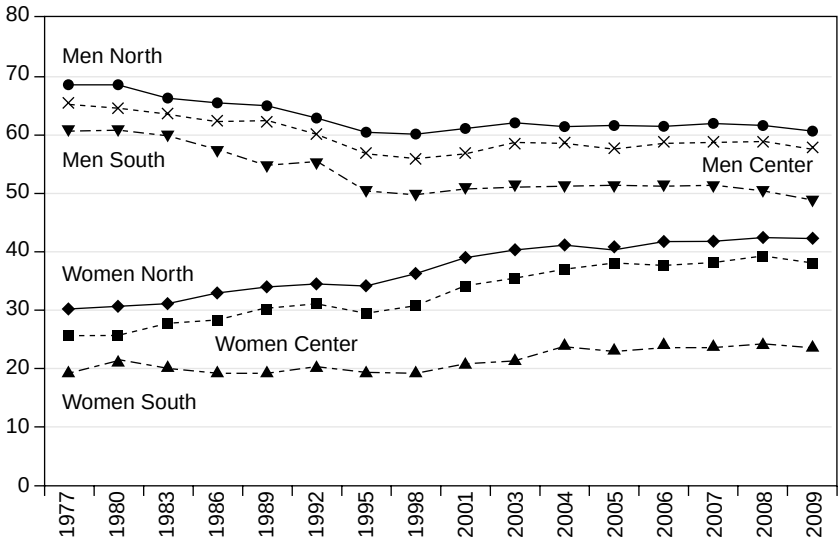


Figure 11.2 Long-term evolution of employment rates of women and men, years 1977–2009 (source: Potestio (2005) and elaboration on ISTAT, Labor Force Survey, various years).

structural funds). Figure 11.2 shows that not only are women's employment rates more geographically divergent than men's (at the end of the period the difference between North and South is around 10 percent for men and almost 20 percent for women), but also that the historical trend is for further pronounced divergence. Starting in the 1980s, while men's employment exhibited a roughly uniform decrease in all regions – up to 10 percent by the end of the period – women's employment rates in the North and the Center increased (by more than 10 percent), while in regions in the South they lagged well behind the rest of the country.

To analyze these trends I shall employ the Bank of Italy's Survey of Households' Income and Wealth (SHIW), a representative sample of Italy's population released at irregular intervals. I will consider four representative years from the 1970s–2000s; namely 1977, 1986, 1995 and 2004, selected on the basis of the availability of microdata.[2] I will consider only individuals of prime age (between 25 and 54 years old) in order to avoid interference with educational and early retirement processes and with school-to-work transitions. Thus, the resulting sample is composed of 4,357 individuals for the year 1977, of which 2,863 women; 7,426 for the year 1986 (2,516 women); 10,350 individuals for the year 1995 (5,274 women); and 8,716 for the year 2004 (4,476 women).

Possibly because men's employment proves less variable both in geographical and historical terms, women's employment attracts more attention from the extant literature. For example, it has been observed (for example, in the case of Italy by Racioppi and Bambini, 2006; Colombino and De Stavola, 1985) that the time dimension of women's employment can be better understood in terms of separately: (1) an age; and (2) a cohort effect. These may in first approximation be captured by comparing the employment of women at a specific age in different periods. Thus, Figure 11.3 displays the percentage of employed women for the four ten-year age cohorts in the sample.

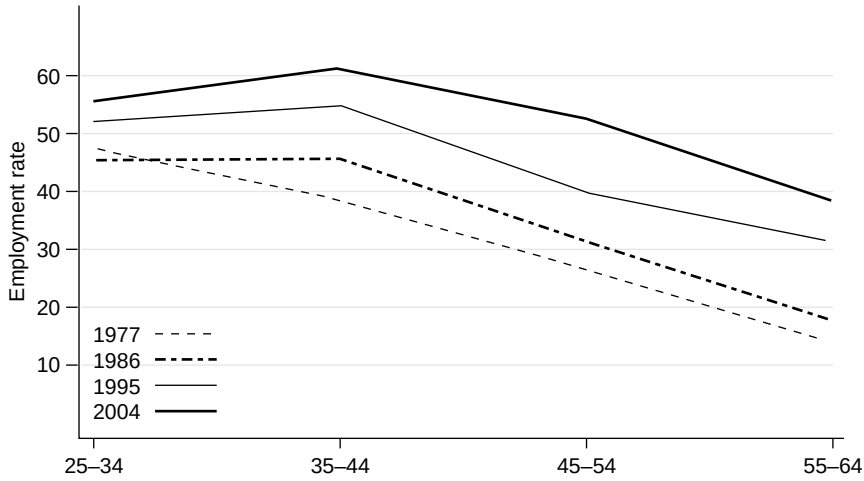


Figure 11.3 Age and cohort effects (source: elaboration on SHIW, various years, women only).

As it turns out, in all years but 1977 the age group 35–44 exhibits the highest employment rate, which tends to monotonically decrease at higher ages. Parallel to this trend we observe a systematic historical increase of the employment of the younger generations of women at all ages, possibly with a minor amplification of the inverse U shape. These findings are usually interpreted in terms of the conflicting effects of the life cycle in terms of varying unpaid work burdens that explain the age variability, and sociocultural development explaining the cohort variability. According to this interpretation the 25–34 age bracket constitutes the period of first access to the labor market immediately followed by early childbearing, and so it exhibits high constraints to women's employment in the labor market. While this constraint is relaxed in the subsequent period (when children grow up), from the age bracket 45–55 onwards burdens of long-term care for elderly relatives tend to emerge, as well as possibilities for early retirement, thus further reducing women's employment. This trend in terms of individual trajectories overlaps with the more general trends of women's increasingly positive attitudes towards work and an increasingly widespread liberal ideology, corresponding to the increase in employment for younger generations of women at all ages of their life cycle.

However, these two explanations tend to be too simplistic, because many other factors are relevant to (men's and) women's employment as well. Indeed, they are not even alternative explanations because education, for example, especially the gender educational gap, plays a crucial role in the higher employment of younger generations (thus explaining the cohort effect), but it may also be considered a component of gender roles (thus impacting on the intra-family distribution of unpaid work burdens and thereby affecting the age effect). Indeed, the role of education is made evident by simply comparing Italy's regions. Since in the next chapters reference to contextual factors will impose constraints on data availability, and the analysis will consequently stop at 2004, it seems convenient to analyze the same year here (results are not significantly different for 2008, the latest year for which microdata is available). As Figure 11.4 shows, the variability of employment rates across Italy's macro-areas is lowest for women with tertiary-level education – that is, university degree or higher educational attainments – who also exhibit the highest average (always above 70 percent). The variability of ERs across regions for women with secondary-level education is higher (with an average close to 70 percent); finally, women with primary or no education exhibit both the lowest average employment rate (with a mean value below 40 percent) and the highest variance across regions.

Moving beyond the singular role of education, it is possible to develop an initial multivariate analysis by considering the impact of individual and household characteristics simultaneously. In order to estimate their joint relevance, it is practical to employ a probit model of the determinants of employment, an analysis that will constitute the starting point for the following, more structured analyses in the next chapters. I selected a number of family variables: marital status (by which in fact I include any emotional relationship that implies cohabitation); a household's real assets (in logarithmic form); the presence in the household of at least one child below the age of three (summarized by the

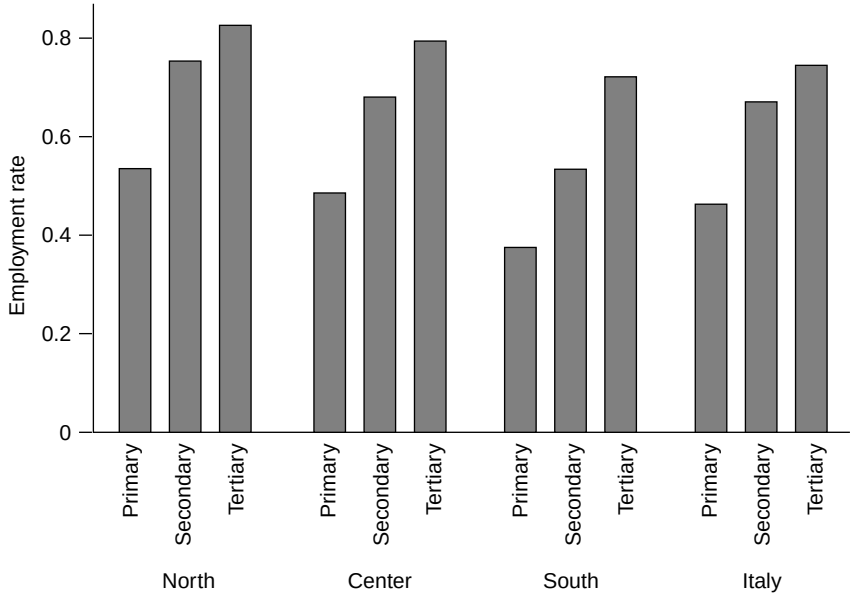


Figure 11.4 Employment rates by area and educational attainment Year 2004 (source: Elaboration on ISTAT, Labor Force Survey, 2005).

dummy variable "children") or of at least one elderly person above the age of 70 (summarized by the dummy variable "elderly"); as well as some contextual variables (proxied by the dimension of the urban agglomeration).[3] These variables are compared to the impact of the following individual characteristics: age (in a quadratic form, to allow for the non-linear pattern observed in Figure 11.3); educational attainment; and gender.

I estimated a probit model jointly for both women and men (a so-called pooled model) and then separately, while as mentioned limiting the analysis to individuals of prime age (25–55 years old). Estimations are run with and without regional fixed effects in order to test for the relevance of contextual factors that cannot be explained by systematic differences in the individual and/or household variables. Results are displayed in Table 11.1 in terms of marginal effects; that is, the variation of the probability of being employed due to an infinitesimal change in the independent variable (or the change from 0 to 1 for dichotomous variables), estimated at the mean value of the dependent variable.

Considering the pooled estimation it emerges that the "woman" dummy variable is statistically significant and close to –0.3, both in the estimation including and that excluding regional fixed effects. In other words, being a woman is associated with a probability of being employed lower on average by more than 30 percent, and this labor market disadvantage cannot be explained by any of the individual, household and contextual variables considered. This result confirms

Table 11.1 Determinants of employment status: probit analysis (marginal effects: changes in the probability of being employed)

	Baseline			*Fixed effects*		
	Pooled	*Men*	*Women*	*Pooled*	*Men*	*Women*
Woman	–0.31			–0.32		
	*(0.01)***			*(0.01)***		
Married	–0.04	0.09	–0.18	–0.03	0.10	–0.19
	*(0.02)**	*(0.02)***	*(0.03)***	*(0.02)**	*(0.02)***	*(0.03)***
Children <3	0.02	0.03	–0.03	0.00	0.04	–0.01
	(0.02)	*(0.02)*	*(0.04)*	*(0.02)*	*(0.02)*	*(0.04)*
Elderly co-living	–0.17	–0.09	–0.22	–0.15	–0.07	–0.19
	*(0.03)***	*(0.03)***	*(0.04)***	*(0.03)***	*(0.02)***	*(0.04)***
Wealth	0.01	0.01	0.01	0.01	0.01	0.01
	*(0.00)***	*(0.00)***	*(0.01)**	*(0.33)*	*(0.00)***	*(0.01).*
Age	0.09	0.07	0.08	0.09	0.06	0.09
	*(0.01)***	*(0.01)***	*(0.01)***	*(0.01)***	*(0.01)***	*(0.0134)***
Age squared	–0.00	–0.00	–0.00	–0.00	–0.00	0.00
	*(0.00)***	*(0.00)***	*(0.00)***	*(0.00)***	*(0.00)***	*(0.00)***
Elementary edu.	0.19	0.07	0.33	0.19	0.07	0.36
	*(0.03)***	*(0.02)**	*(0.07)***	*(0.03)***	*(0.02)**	*(0.07)***
Lower secondary	0.34	0.16	0.49	0.31	0.13	0.48
	*(0.04)***	*(0.04)***	*(0.07)***	*(0.04)***	*(0.03)***	*(0.08)***
Higher secondary	0.46	0.22	0.7	0.42	0.18	0.62
	*(0.04)***	*(0.04)***	*(0.07)***	*(0.05)***	*(0.04)***	*(0.08)***
Tertiary edu.	0.31	0.11	0.52	0.29	0.09	0.51
	*(0.02)***	*(0.01)***	*(0.03)***	*(0.02)***	*(0.01)***	*(0.03)***
Observations	8,716	4,240	4,476	8,716	4,240	4,476
Log-likelihood	–4,240.61	–1,360.84	–2,711.35	–4,002.67	–1,295.95	–2,505.6

Source: Elaboration on SHIW (2005), sample restricted to age bracket 25–55.

Notes
Robust standard errors in brackets. Reference educational attainment is “no education”, all estimations include the dimension of the urban aggregate of residence among the control variables (never statistically significant). Reference region for fixed effects is Latium.
**: significant at 1%, *: significant at 5%.

the rather obvious claim made at the beginning of the chapter, that gender is a fundamental variable to explain labor market dynamics and it cannot be reduced to gender-neutral individual characteristics such as education (though its relevance may be partly affected by these variables).

While individual characteristics are all statistically significant at the 1 percent significance level, mixed evidence is found with respect to household-level variables. Concerning individual characteristics, age is found to exhibit the same inverse U-shaped impact displayed in Figure 11.3 (as implied by the positive linear and negative quadratic terms), and thus the story in terms of childcare and eldercare family burdens seems insufficient to explain the life cycle of employment since these variables are separately included in the estimation. The probability of being employed increases at higher educational attainments, though with a non-linear pattern (higher secondary education exerts a higher impact on the probability of being employed than tertiary education). Concerning household characteristics, the presence of an elderly person in the household significantly decreases the probability of being employed, while the presence of at least one child below three years old seems to exert a negligible impact. Real assets are significantly associated with a higher probability of employment, though their impact is very small.

However, the most interesting results emerge from a comparison of the separate estimates on men and women. Separate estimations allow the detection of significant differences between the determinants of men's and women's employment, thus an attempt to explain the determinants of gender roles in the labor market.

From the gender-specific estimates it is found that family arrangements and education are much more important for women's employment than for men's, both in terms of the magnitude of the coefficients and of statistical significance (the relevance of the latter criterion was also implied by an analysis of Schmoller's works in Chapter 4). Specifically, the presence of a cohabiting elderly person reduces women's probability of being employed by more than double that of men's (–20 percent as opposed to less than –10 percent).

Crucially, the coefficients on the "marital status" and "children" dummy variables are opposite for men and women. Being married is negatively correlated with the probability of employment for women and positively related to men's; in the estimation of women's employment the coefficient on having at least one child below three years old exhibits a high variance and is thus not statistically significant, while after controlling for contextual factors (that is in the fixed-effect estimates) it is significantly positive for men. This evidence reflects the well-established breadwinner role of Italian men, who arguably face a higher incentive to work if they have relatives in the household, an incentive that appears even stronger than the obstacle of care burdens for women (which as mentioned do not always exert significant impacts on employment status). However, it may also be the case that, as again implied by Schmoller's theory of the development of the social and sexual division of labor, cohabiting with a woman relieves a man from many housework and similar constraints.

What is crucial from the point of view of diversity is that, since they show opposite impacts for some same variables, the two genders are best understood

in terms of diversity rather than heterogeneity. This is in fact but an application of Mill's prescription (commented upon in Chapter 3) that social groupings or analytical classes should be developed with the aim to preserve a theory's self-consistency; that is, in this case, with the aim to prevent violations of a scientific law. From an applied point of view, it would be possible to prevent the violation implied by the sign reversal (for example, from the pooled to the men's estimation in the case of the dummy variable "married") by using a set of interaction terms; that is, by shifting gender parametric heterogeneity from the intercept (the "woman" dummy variable) to the coefficient of one or more variables. However, from the the same applied point of view this procedure is not equivalent to estimating separate regressions because it suffers from the drawback of imposing an a priori choice on the researcher regarding the variable(s) to be allowed to interact, it being inappropriate to include a plethora of interaction terms, one for each independent variable. In other terms, the approach based on a pooled estimation with interaction terms implies the unwarranted assumption that all other coefficients (on which no interaction is applied) are the same for men and women. Moreover, it is evident that from a theoretical point of view separate estimations correspond to the hypothesis that men's and women's behavior is regulated by different models, whereas the use of a pooled estimation with many interaction terms assumes a single theoretical model to be modified ad hoc in the estimation phase. That this latter option is inferior to the former may be evidenced by the fact that some variables are statistically significant for only one gender, thus hinting at the hypothesis that two models of behavior may be needed.

Finally, to highlight the role of geographical heterogeneity, I estimated a second model, whose results are reported in the three columns on the right-hand side of Table 11.1. Here region-specific intercepts (fixed effects, whose coefficients are reported in Appendix A2) are added in order to emphasize the contribution of regional provenance on the probability of being employed, given the other observable characteristics. F-tests on the joint significance of the fixed effects confirm their informational value. Moreover, according to BIC and AIC tests the improvement in the log-likelihood justifies the inclusion of the additional variables, for women (and in the pooled regression) even more than for men. This result highlights that women's employment is affected more by contextual variables, while the determinants of men's are more uniformly distributed across regions. Looking at the coefficients, as expected a clear North-South divide emerges, not only in absolute terms but also in gender differentials, with regions in the South contributing more negatively to women's than to men's employment rates.

For both the pooled and the male samples, the model with regional fixed effects produces lower impacts (in absolute value) of family and individual variables on the probability of employment. Compared to the previous model, having at least one child below three years old in the household becomes statistically significant and positive for men; being married exerts a higher impact on the probability of men's employment and a lower impact on women's, while the impact of cohabiting with an elderly person decreases in absolute value (becoming less negative) for both women and men. There is a slight reduction in the

coefficients of education for men (not significant for women) vis-à-vis a small increase of the effect of age.

Overall, it appears that women's employment is more frequently affected by contextual factors than men's. However, the interpretation of these regional effects is not straightforward, as they might summarize the impact of a heterogeneous set of contextual factors, such as macroeconomic conditions, the social and cultural environment, regional policies and institutions. Disentangling these factors is of the utmost importance to policy design, as many regional dummy variables prove statistically significant. However, it is even more relevant to the aim of showing that gender differences are at least partially socially produced and that consequently they should be enlisted to the category of diversity and not of heterogeneity. To do so, it is necessary to investigate what factors have been identified as most relevant by the existing literature, and to develop a theoretical model of employment status that is compatible with the methodological tenets and the implied theory of behavior connected to the approach of diversity.

The theoretical literature on women's employment

The economic literature has adopted several approaches to exploring the determinants of women's participation in the labor market. Most of this literature makes reference to some form of heterogeneity to explain the kind of differences between men and women observed in the previous paragraph. This feature is not particularly surprising since the bulk of the literature belongs to the mainstream of contemporary economic theory, and given the strong relation between the marketplace vision of the economy, the *homo economicus* theory of behavior and the approach of heterogeneity (the relation described in Chapter 1). However, this approach came under some criticism from a minor though expanding seam of literature, which will be considered below.

Neoclassical theory formally represents employment as the result of a rational, utility-maximizing choice on the amount of time to be devoted to work in the market as opposed to leisure and/or domestic production (see, for instance, Attanasio *et al*., 2008). Incidentally, this implies that in a neoclassical world individual employment is determined by labor supply alone. As this literature focuses on employment status, the problem takes on the nature of a dichotomous variable where for both sexes individuals' choice is based on the comparison between the full wage and their reservation wage. The full wage measures the opportunity cost of staying at home; it is computed as the sum of the present value of (1) the salary offered in the market, and (2) future earning losses caused by the non-accumulation and depreciation of human capital due to inactivity (Even, 1987). The reservation wage measures the minimum wage that will induce a person to enter the labor market and it is equal to the utility value of the time spent at home. Men and women will maximize their utility and consequently they will choose to enter the labor market if the full wage exceeds their reservation wage. Finally, it is usually (though not necessarily) assumed that the decision to enter the labor market corresponds to employment status;

that is, that no involuntary unemployment exists and job status is determined only by labor supply.

This way, any observed difference between individuals is attributed to the given data of the model, usually in the form of different preferences (affecting the reservation wage) and/or different constraints (affecting the reservation and/or the full wage). The more simplistic and straightforward application of this model is the assumption that those classes of individuals who exhibit lower employment rates are evidently characterized by different tastes; that is, women would exhibit on average a preference for not working in the market. However, this kind of explanation was soon substituted for the assumption that men and women are on average subject to different budget constraints. Accordingly, the way to provide an explanation for women's supposedly lower full wage (hence lower labor supply) that is most respectful of neoclassical theory is to assume that in the market they are less efficient than men, possibly because they have an absolute advantage in housework activities. Or, in more refined terms but with no different implied model predictions, that women are more efficient than men both in market and non-market production but all the more so in non-market production, so that they exhibit a comparative advantage in housework. In Samuelson's (1971) words:

> But a woman is not a man, and men are not at any age homozygous twins. Thus, let women be three times as efficient in beaver production and two times as efficient in deer production [...] what predictions about exchange ratios can we now obtain [...]?
>
> (Ibid., p. 405)

Along these lines, an early contribution that gave rise to much follow-up literature was developed by Becker (1957), who noticed that even if men and women were originally equally productive, if employers have a "taste for discrimination" they will pay lower wages to certain categories of individuals, thus discouraging their labor supply, even if this effectively means hiring less productive workers. This behavior on the side of employers is rational (they act upon their preferences) but inefficient, and therefore incompatible with competition that in the long run will drive out of the market all those firms that discriminate against productive individuals. A solution to the problem of reconciling the assumptions of competition and of discrimination is the theory of statistical discrimination, attributed to Edmund Phelps and Kenneth Arrow. Let us assume that (1) employers cannot observe individuals' productivity *ex ante*, but they know that a certain observable characteristic (such as race or sex) is on average correlated with a lower productivity; (2) many women are more productive than many men, but on average women are less productive (due, for example, to the more frequent interruptions of their working career). Under these circumstances it is rational and efficient for employers to pay a lower wage to the individuals carrying the mentioned observable characteristic (that is, being female), although it is recognized that this presumption will sometimes produce biased estimates. Firms behaving this way will actually have a more rather than a less efficient cost structure.

As it emerges, by assuming that women exhibit more irregular employment patterns, this theory requires specific hypotheses on the working of the labor market as well as on families' internal organization. However, Becker (1965) and Mincer (1969) show that this aforementioned situation is actually an equilibrium, in which employers' choices validate the sexual division of labor at home, and vice versa. Women specialize in household production (that is in the unpaid labor at home), hence they actually exhibit irregular or altogether inexistent careers in the labor market; consequently they are a target of statistical discrimination; hence, it is rational that they specialize in non-market activities, because men in their household have a comparative advantage (a higher full wage) in the labor market. Feminist economists deem this methodology an exercise of circular reasoning (Barker, 1999, for instance), who stress that in order for this model to predict women's employment it requires additional assumptions: that all women will marry, that heterosexual marriage is the norm and that labor income will be shared equally.

Further developments of this model have followed two paths: on the one hand the so-called "new household economics", focused on modeling households' decision making by producing formal models of unitary households (where a benevolent or paternalistic decision maker represents the choice of the whole family); on the other the game-theoretic models of intra-household bargaining, between separate – either cooperative or competitive – decision makers. Within this literature, it is frequently found that the standard pooling hypothesis of the unitary labor supply model – that is, that consumption and labor supply decisions are modeled as if households' members behaved as a single rational agent, maximizing a unique utility function subject to a unique budget constraint – does not necessarily hold and proves unable to explain several empirical findings (see, for instance, Donni, 2007; Blundell *et al*., 2007; Lundberg and Pollak, 1996).

The economic literature on gender diversity and employment

As shown in the previous section, the overwhelming majority of the works so far considered only investigate heterogeneity between the two sexes in order to explain the observed different patterns. Even when considering environmental influences, the neoclassical paradigm, which implies that behavior is the result of individuals' autonomous and free choice, is not questioned. Hence, for example, culture only matters in so far as it affects individuals' preferences (exceptions being purely applied works). The theoretical benchmark model of this approach was developed by Akerlof (1980). By introducing a positive value of reputation or social recognition as one of the arguments of individuals' utility function, Akerlof formally reconciles the *homo economicus* paradigm with the consideration for social influences on individuals' behavior.

This method is subject to two separate criticisms. The first is that, as mentioned, this approach identifies employment status with labor supply. This aspect is prone to the well-known Keynesian criticism, implying the existence of involuntary unemployment, and is specifically in contrast with the methodology that will be

adopted in the present work. As mentioned, by showing that individual factors interact strongly with contextual factors in determining men's and women's employment (see Chapter 12), I claim that any attempt to explore solely supply-side determinants of women's employment, discarding these interactions, may lead to biased estimates. This is because context variables may reflect supply as well as demand conditions and because their interaction with individual variables prevents the representation of the choice process as the maximization of an individual's objective function – as determined by given and stable preferences under exogenous constraints, both independent of the social environment.

The second criticism of the aforementioned approach is that it identifies labor supply with the result of a free and autonomous individual choice. This issue is directly linked to the critique of the *homo economicus* hypothesis dealt with in Chapter 4. Along similar lines to Mill's criticisms of Bentham's theory of behavior, recent economic literature has frequently criticized many of the underlying assumptions of this paradigm. For example, Sen (1981) claims that utility may be conceived of better as a vector rather than a scalar, because several criteria and dimensions of human behavior overlap in the process of making a choice. Sen (1990) stresses that adaptive preferences imply that individuals may not have a clear awareness of what leads to their highest well-being. Nussbaum (1999) highlights that emotions and preferences are formed under unjust social conditions, and therefore we cannot interpret individuals' stated preferences as the reality of what they want or need. From this point of view, the Institutionalist and Marxist literature shares with a great swathe of feminist literature the social constructivist perspective, according to which individuals are not born the way they appear and behave as socially embedded adults, but are, in a sense, produced by society (see, for instance, the essays collected in Barker and Kuiper, 2003; Ferber and Nelson, 2003).

However, the feminist literature adds a number of further criticisms, characterizing the *homo economicus* paradigm as an artificial construct, excessively influenced by what is conventionally and stereotypically perceived as masculine; for example, bodily strength, independence, rationality, self-interested egoism, isolation and self-sufficiency. These characteristics lead McCloskey (1993) to suggest an image of *femina economica* along with the *vir economicus*. Accordingly, Nelson (1996) argues that many actions (those implying family interpersonal relations, for example) are better understood in terms of responsible commitment rather than choice. Similarly, Folbre (1994) analyzes society in terms of collective action, whereby groups of individuals act under structures of constraints; "sets of asset distributions, rules, norms and preferences that empower given social groups" (p. 51). In general, feminist economics literature tends to criticize the paradigm based on egoistic individualism, contractual exchanges and constrained optimization for its disproportionately male, adult and Western point of view. As Strassmann (1999) synthesizes, "[…] the emphasis on choice rather than on the conditions that critically underlie choices misleads by giving the impression that outcomes may be adequately understood without theorizing key structural circumstances" (p. 362).

The specific topic of employment has indeed been little investigated by the feminist applied economics literature, which has mostly been concerned with wage gaps, occupational segregation and intra-household dynamics. This literature, as Warnecke (2009) highlights, has developed in recent decades into two parallel strands. One could be labeled of the "feminist empiricists", who add sensible considerations and themes to their applied works yet do not methodologically challenge the mainstream paradigm and often remain in the neoclassical realm; and the "feminist methodologists", who maintain that the neoclassical paradigm should be disregarded rather than improved (as it provides a hindrance to the advancement of women's interests) but who largely neglect empirical work.

The present work could be said to be located in feminist economics literature in so far as it aims to highlight (1) the fundamentally different processes that determine women's and men's economic outcomes, (2) the relevance of context and social conditions in determining these processes. However, due to its scope that spans both the methodological and the empirical, it is possible that it does not fit either of the two streams.

12 How economics may help in understanding gender

As highlighted in the previous chapter, gender is a fundamental variable in understanding labor market dynamics in Italy (and arguably in all developed countries), and it appears that in turn it is a form of difference produced by social dynamics that may in part be explained by economic analysis. In this chapter I review the applied literature on women's employment and the gender employment gap, with the aim of determining the social forces that most probably affect gender roles in the labor market. I then propose an econometric model to take these contextual factors into account as an explanation of the determinants of the impact of gender on employment.

As I have explained, the choice of such a model is inspired by the theory of behavior investigated in Chapter 4 and the overall concept of diversity defined in Chapter 1. However, as was shown in Chapter 4, subjective utility theory is liable to a wide range of interpretations related to what I call its RUT definition. Correspondingly, provided one is willing to make the very strong assumptions that individual employment is only determined by labor supply, and that the latter is only a matter of individual rational choice, it will be shown that a rather straightforward interpretation of the statistical model here adopted is possible, in terms of an individual's utility-maximizing behavior coherent with RUT. However, though from an empirical point of view a same model may be subject to two (or more) interpretations, from a theoretical point of view it makes a big difference whether we embrace a subjective utility-based argumentation, which is based on a certain pre-analytical vision of the economy and well-defined methodological postulates, or if instead we analyze the issue within a conceptual framework that cannot be reduced to a single all-encompassing formal model but that nevertheless rests upon a completely different vision and method.

The applied literature on women's employment

A large number of studies have emerged that put the neoclassical model to the test, thus tending to equate employment with labor supply. These contributions usually introduce further forms of heterogeneity, besides gender heterogeneity, to account for a number of phenomena. Hence, the full wage is made dependent on education, work experience and career breaks; while the reservation wage is

frequently assumed to depend on families' structure, such as marital status or the presence of young children, or on social and cultural frictions between work and family activities.

Among personal characteristics, education is found to be a major factor influencing women's employment. It is thought to do so by affecting wages and, in turn, labor market participation and fertility decisions, as well as the timing of such events (Gustaffsson and Kenjo, 2007). Internationally, countries with high levels of education are characterized by lower fertility rates and vice versa. However, several recent studies at the micro level find positive correlations between education and fertility (Bloemen and Kalwij, 2001; Del Boca and Pasqua, 2005; Moffit, 1984). This evidence is partially explained by the prevalence of the income effect over the substitution effect for highly educated women, who can afford to pay for childcare services on the market (for example Ermisch, 1989).

Among household characteristics, the socioeconomic background of her partner plays an important role in the probability of a woman of being employed, as of course does the presence of children. The theory of the household's allocation of time (Becker, 1965) states that an increase in husbands' income may induce women to consume additional non-market time, thereby reducing their participation in the labor market. However, recent studies have found a very weak correlation, or none at all, between a husband's income and the probability of his wife being employed. Two reasons may account for this evidence: the rising level of women's education and the increasing trend of mating by education; that is, marrying someone holding the same or comparable educational attainment (Becker, 1973; Mare, 1991; Schwartz and Mare, 2005).

Several studies confirm that family-related responsibilities negatively affect women's participation in paid employment (for example, Adam, 1996; Connelly, 1991; Drobnic, 1997; Giannelli, 1996; Grimm and Bonneuil, 2001). However, cross-national studies find that the influence of children on women's labor supply follows country-specific patterns (Bardasi and Gornick, 2003; Gustaffson *et al.*, 1996; Jaumotte, 2003). National differences are often explained in terms of public policies for the support of working mothers, such as parental leave schemes (for example Hofferth and Curtin, 2003; Ruhm, 1998; Pylkaenen and Smith, 2003), or social benefit and tax systems (for example, OECD 1996, 2002, 2003, 2004), or the availability and quality of public childcare facilities (for example Del Boca and Locatelli, 2006; Cleveland *et al.*, 1996; Connelly, 1991, 1992; Hofferth and Wissoker, 1992; Powell, 1998).

Finally, the institutional determinants of women's employment are considered increasingly relevant, as patterns of combining work and family activities are very different across countries, depending on their economic structure, institutional arrangements and sociocultural norms. A wide number of studies have been undertaken to explore the role of social policies in combining work and family, in particular the availability and the quality of public childcare. When childcare services are of bad quality, too expensive, or scarcely available, the

mothers' reservation wage increases, thereby lowering women's labor supply (for example, Anderson and Levine, 1999; Conelly, 1991, 1992; Hofferth and Wissoker, 1992; Kimmel, 1995; Powell, 1998). Apps and Rees (2004) add that, among the OECD countries, those countries supporting motherhood through childcare facilities rather than child benefits tend to have both higher rates of women's labor supply and higher fertility rates.

Among social policies, the impact of parental leave and tax and social benefits on women's employment has been analyzed. Parental leave supports women's labor market attachment by facilitating their return to employment after maternity (Hofferth and Curtin, 2003; Ruhm, 1998); while means-tested benefits, joint taxation and tax reductions on the dependent spouse create work disincentives and inactivity traps for the secondary earner. With respect to the latter, Apps and Rees (2004) find that, within OECD countries, countries with individual rather than joint taxation are characterized by higher fertility rates and greater women's labor supply. Adopting a model of labor supply and fertility choice under credit rationing and market imperfections, Del Boca (2002) explores the impact of several social policies on women's labor supply in Italy. The results seem to point to the fact that the decisions to work and to have a child are similarly affected by the same factors, being positively influenced by the availability of childcare and of part-time jobs.

Very recently, a strand of literature emerged that sought to analyze the role played by sociocultural norms in determining women's labor supply (by producing heterogeneity of preferences between men and women). Research in this area showed that countries with more liberal attitudes toward gender roles, higher work orientation among women and greater acceptance of mothers of young children entering the labor market show higher women's employment rates (for the relationship between women, work and culture, see Antecol, 2000; Cunningham, 2008; Eberharter, 2001; Fernández, 2007; Fernández and Fogli, 2009; Fernández *et al*., 2004; Pencavel, 1998; Reimers, 1985; Vella, 1994).

To sum up, mainstream economic theory traditionally approaches the issue of gender differentials in the labor market by means of microeconomic (often game-theoretic) models of the household, ultimately based on gender differences in preferences and/or endowments (sometimes attributed to gender-based discrimination). However, at the same time the applied literature has extensively studied other relevant factors such as the role of education, social policy, macroeconomic conditions, and culture. In my view, this applied literature offers interesting insights on the determinants of women's employment but it suffers from a key limitation; that is, it has mostly developed into two related but separate strands. One of these deals with individuals' characteristics and how they affect women's labor supply, usually employing microdata surveys; the other investigates the relevance of the institutional context and public policy (or "macro" factors), usually by analyzing cross-sections or panels of aggregate data.

While each strand of the literature recognizes its link to the other, they usually ignore or assume as exogenously given the relations, variables and theories put

forward within the other strand. This separation is problematic from an applied point of view because it marks a possibly untenable *ceteris paribus* hypothesis. As I aim to show in the next chapter, the ignorance of possible interactions between micro and macro factors may produce sensible biases in the applied estimates, for two reasons.[1] On the one hand, if the impact of individual characteristics depends on environment, the individual estimates of any regression that do not control for these interactions could at best be considered as valid only on average and for the specific setting in which they are computed. On the other hand, the macro-level variables may not exert only a direct effect on women's employment but also an indirect one, by modifying the impact of micro variables. The resulting estimates of a regression ignoring these interactions may thus suffer from a missing variable bias and lead to biased estimates of the impact of the micro variables.

As documented by van der Lippe and van Dijk (2002) such concerns are relatively more diffused in sociological literature, where alongside a macro (comparative) approach to women's employment and a micro (explanatory) approach, mixed micro/macro approaches (that is, approaches employing multilevel analysis) receive increasing attention. This diffusion aims to overcome some of the difficulties implied by the cross-country comparative approach, which encounters empirical difficulties in finding an adequate number of indicators for a large sample of countries, as well as those impled by individual-level explanatory studies, which can hardly control for the role of institutions in a rigorous way. However, as a matter of fact this method has so far been applied mostly to the study of the household division of unpaid work (for example, by Fuwa, 2004; Fuwa and Cohen, 2007; Gonzálezet *et al*., 2009; Knudsen and Wærness, 2007; Kunovich and Kunovich, 2008; Stier and Lewin-Epstein, 2007; Voicu *et al*., 2008) rather than to the investigation of women's employment in the market (as for example, by van Damme *et al.*, 2008). Moreover, the same van der Lippe and van Dijk (2002) note that if applied to international datasets the multilevel approach suffers from the same empirical limitation as comparative studies in finding an adequate set of macro indicators. Thus, the use of a regional dataset, as here, appears all the more suited to overcome many of these challenges.

In the economics literature, the few papers that are aware of the limitations of the *ceteris paribus* clause implicit in both strands of the mentioned literature typically tackle the problem by means of a difference-in-difference approach; that is, by employing dummy-variable interaction terms between micro and macro variables using a single micro dataset. However, this method is not feasible if the environment affects individual values by means of several factors simultaneously, again for two reasons. First, observations may be clustered by region – that is, the error term of the regression is not independently and identically distributed; second, accounting for the simultaneous direct and indirect impact of many environmental factors may require an excessive number of dummy variables. I propose the use of multilevel analysis as a more direct and rigorous way simultaneously to estimate the impact of micro and macro factors within a unified regression model. This method allows us to consider a wider set of

determinants for women's employment than is possible with standard regression analysis; for example, the simultaneous roles of education and of social policy. However, due to stringent computational requirements, the use of multilevel analysis indicates the prior application of a multivariate analysis to summarize a great number of macro variables into a small set of synthetic macro indexes, as below.

The social determinants of gender roles in the labor market

To consider the relevance of the social and institutional factors mentioned above in determining the impact of gender on individuals' employment, I collected from several sources a number of variables aggregated at the regional level.[2] The variables selected are listed in the first column of Table 12.1. I normalized all variables by their national average, and aggregated some of them into homogeneous indexes. This procedure as well as the subsequent multivariate analysis are made necessary by the very strict computational requirements for the estimation of multilevel models (described below), which suggests the inclusion of a limited number of variables for the higher (macro) level.[3] However, by first aggregating a number of homogeneous indexes and then running a principal-component analysis I am able to preserve a meaningful economic interpretation of the resulting variables while allowing for the consideration of several different factors within the same analysis. Data over such a long time span and with such a detailed regional focus are very hard to collect even in European countries, and for a number of variables I am bound to resort to proxy measures. However, one of the advantages of the use of multivariate analysis is not only to help in the selection of the variables to be aggregated in order to arrive at a synthetic index, but most notably to retain in each index only that part of each variable's variance that is correlated with the variance of the other variables composing the index. Thus, it may be said that the resulting indexes convey more indirect information – liable to some disagreement in the interpretation of economic meaning, but more specific and self-consistent. Thus, even though some of the original variables loosely proxy the measures of interest, by retaining only the part of their variance that is more correlated with the other variables included in the same index, I make the best possible use of them and obtain the most reliable final synthetic indicators as possible.

To aggregate variables, in the first step I make use of harmonic means in order to get an accurate measure of the aggregates of interest in their multidimensional nature. In the construction of the indexes, harmonic means place more weight on the regions with a more even development of all the relevant variables and less weight on those exhibiting some disproportionate value in one of the variables (for more details, see Casadio and Palazzi, 2004). Descriptive statistics for the original variables and the aggregated indexes are reported in the Appendix.[4]

As shown in the fourth column of Table 12.1, I obtain five synthetic indexes representing the regional levels of tertiarization, GDP growth, social assistance,

Table 12.1 Macro indicators: description and plan of aggregation

Variable	*Description*	*Source*	*Index*
Tertiarization	Share of employment in the services sector (men and women)	ISTAT	Tertiarization
GDP growth	Regional aggregate GDP growth rate on the two preceding years	ISTAT	GDP gowth
Social assistance expenditure	Per capita public expenditure on social assistance	ISTAT	Social assistance
Kindergarten	Number of children hosted in public-financed kindergartens, per thousands of children 0–3 years old	CNDAIA (2006)	
Direct social expenditure	Direct public expenditure as a fraction of total public expenditure on social assistance	ISTAT	
Public services	Expenditure for in-kind services over expenditure for cash transfers	ISTAT	
Gender segregation	As defined by the European Commission and Council (2005)	ISTAT (LFS)	Gender-based discrimination
Prominent employment	Share of women's self-employment as a fraction of total self-employment	ISTAT (LFS)	
Per capita GDP		ISTAT	MDI – modified human development index
Infant mortality	(Inverse of) raw infant mortality rate	EUROSTAT	
Culture	Average households' expenditure on cultural and entertainment activities as a fraction of average households' disposable income	ISTAT	
Information	Average households' expenditure on newspapers and periodicals as a fraction of average households' disposable income	ISTAT	

Note
ISTAT is Italy's National Statistics Office. LFS stands for Labor Force Survey.

gender discrimination and a modified human development index (MDI). The index of tertiarization measures the region's share of employment in the services sector, while GDP growth is the annual GDP growth in the region, lagged by one year (to prevent issues of endogeneity). The nature and extent of publicly provided social assistance is a proxy of public policy aimed at promoting the conciliation of family responsibilities and market work. It is a compound measure of: per capita public expenditure on social assistance, percentage of children hosted in publicly financed kindergartens, share of direct social expenditure and of in-kind expenditure over total public social expenditure. The discrimination index synthesizes both horizontal (occupational) and vertical gender segregation[5] in the labor market. In the absence of better data, the latter is proxied by the number of women holding prominent self-employed occupations as a share of the total number of self-employed people in the region.[6] Finally, the modified index of human development mainly captures the regions' sociocultural development. As shown in Table 12.1, it differs from the Human Development Index in two respects: aggregation is obtained by a harmonic instead of an arithmetic mean (as mentioned before), and some underlying variables are different in order to catch better the relevant differences among Italy's regions while avoiding the inclusion of some variables that will be measured at the individual level (such as educational attainment).

In order to adopt more synthetic macro indicators and to reduce the number of variables to be considered in the analysis, a principal-component analysis using the 20 regional observations over the four years was carried out on the five mentioned indexes, plus an index of time. The analysis was carried out in keeping with common practice (see, for instance, Nardo *et al*., 2005; Nicoletti *et al.*, 1999; Kline, 1994),[7] and I obtained three macro indicators, as shown in Table 12.2, that are open to fairly straightforward interpretation.

The first factor is highly correlated with the modified index of human development (+0.88) and the public provision of services (+0.61), while being negatively correlated to the gender discrimination index (–0.87). Due to the specific

Table 12.2 Results from the principal component analysis: rotated factor loadings

Index	*Civic development*	*Private provision of services*	*Local macroeconomic conditions*
Time		+0.79	
Tertiarisation		+0.72	
GDP growth			+0.92
Social Assistance	+0.61	–0.41	
Gender Discrimination	–0.87		
MDI	+0.88		

Source: Elaboration on various sources (see Table 12.1).

Note
Principal-component analysis was used to extract the factors, using 80 observations for the 20 Regions in the four selected years. Rotation of factors was then adopted by means of the varimax method. Blanks represent absolute loadings <0.33.

socioeconomic differences among Italy's regions, and social assistance being an important public policy for conciliation, I interpret this factor as an index of regional *gender-aware civic development* (henceforth CD). The second factor is negatively correlated to the public provision of social assistance (−0.41) and positively correlated to the extension of the services sector (0.72) and time (0.79). Thus, a plausible interpretation of this factor is that it measures the extent of the *private (market) provision of services to households* (henceforth PPS). Finally, the third factor is highly correlated to the lagged regional GDP growth (+0.9), and weakly negatively correlated with tertiarization. As Italy's services sector exhibits on average a lower productivity growth than the manufacturing sector, I interpret this factor as a measure of *local macroeconomic conditions* (henceforth LMC).

As shown in the Appendix, the three indices retain a very high variability across regions. Thus, Figure 12.1 plots the density estimation (obtained using the Epanechnikov Kernel method) of the gender-aware civic development index over the four relevant years. As it emerges, in all years the distribution resembles an inverse U shape, with few regions exhibiting very high or very low values, and substantially no average time trend. Specifically, in 1977 a group of leading regions are followed by the others, scattered along the distribution; in 1986, two marked groups emerge, with a possible subdivision of the leading group into two groups of regions; then in 1995 a substantially regular distribution emerges, exhibiting no particular peaks. Finally, this process of semi-convergence culminates in 2004, with a much more compact distribution, exhibiting three minor peaks.

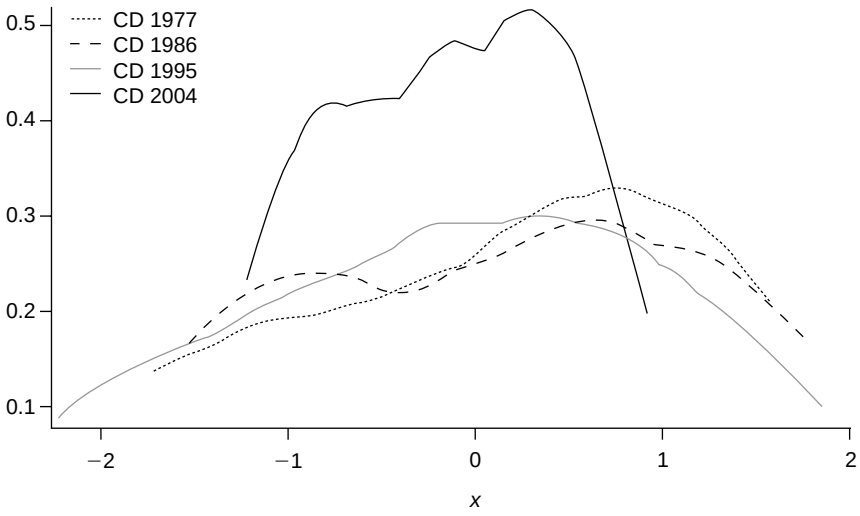


Figure 12.1 Long-term evolution of the gender-aware civic development index (source: elaboration on various sources, see Table 12.1).

As documented in Figure 12.2, this process roughly corresponds to an initial condition of advantage for the regions in the North and Center of Italy, that however tend to exhibit a reduction of CD over time. In parallel, regions in the South originally lagging behind tend then to exhibit a smaller reduction followed by a growth of the index, though without catching up with the others. Throughout the period, regions in the North of Italy exhibit a higher CD on average, followed by regions in the Center.

By contrast, the measure of private provision of services (PPS) exhibits a clear time trend (time being a component of the index), tending to monotonically increase on average (compare Figure 12.3). The same inverse U shape is found, with the possible emergence of two small groups of regions at the margin, exhibiting very high and very low values in 2004. However, Figure 12.4 highlights that this uniformity does not correspond to a static distribution of regions: indeed, the North exhibits the smaller time trend, starting in 1977 and being overtaken by regions in the South by 1986. Regions in the Center always exhibit the highest values on average.

Finally, the local macroeconomic conditions (LMC) exhibit a clear trend of divergence, as highlighted in Figure 12.5. While there is no trend in the mean value, the distribution displays a substantial increase in its variance as time goes on. Figure 12.6 shows that this process corresponds to a marked increase in the index for regions in the North, a smaller increase for the Center, and a stable trend in the South.

In the next chapter, the three factors developed here will be employed within a multilevel analysis of men's and women's employment as explanatory variables for the level-two (regional) units. That is, they are the factors that will be used to explain the impact of the socioeconomic context on individuals' employment and in particular they constitute the social determinants of the

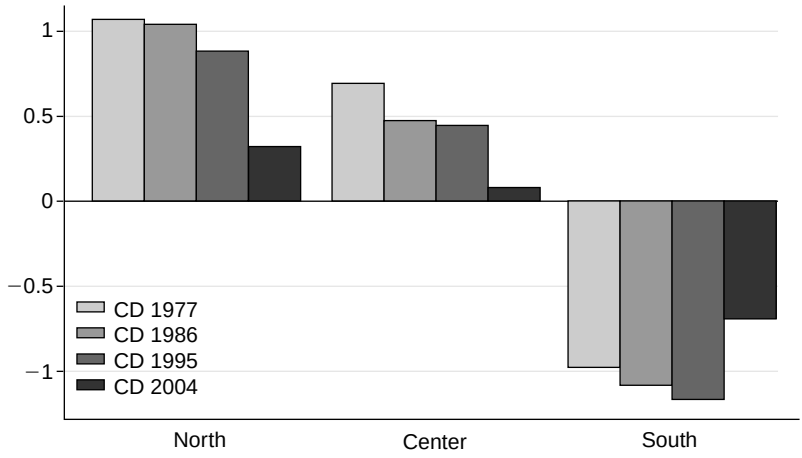


Figure 12.2 Long-term evolution of the gender-aware civic development index by area (source: elaboration on various sources (see Table 12.1)).

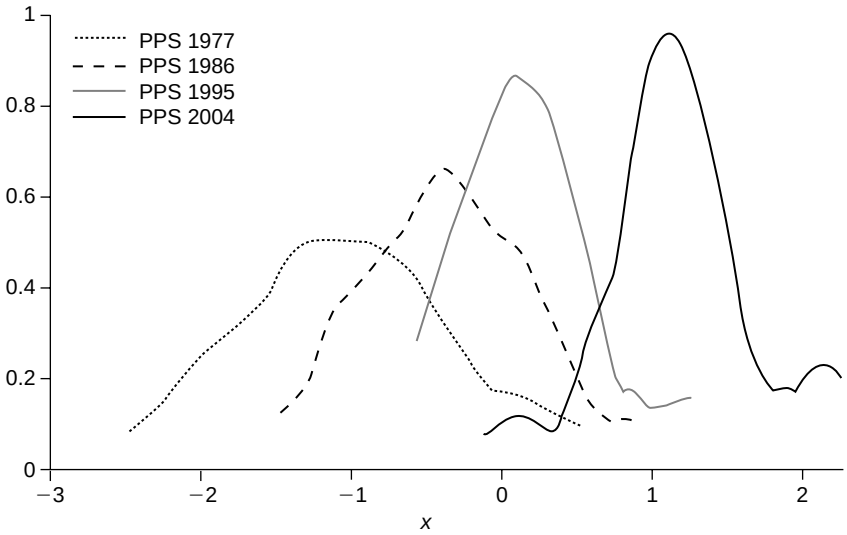


Figure 12.3 Long-term evolution of the private provision of services index (source: elaboration on various sources (see Table 12.1)).

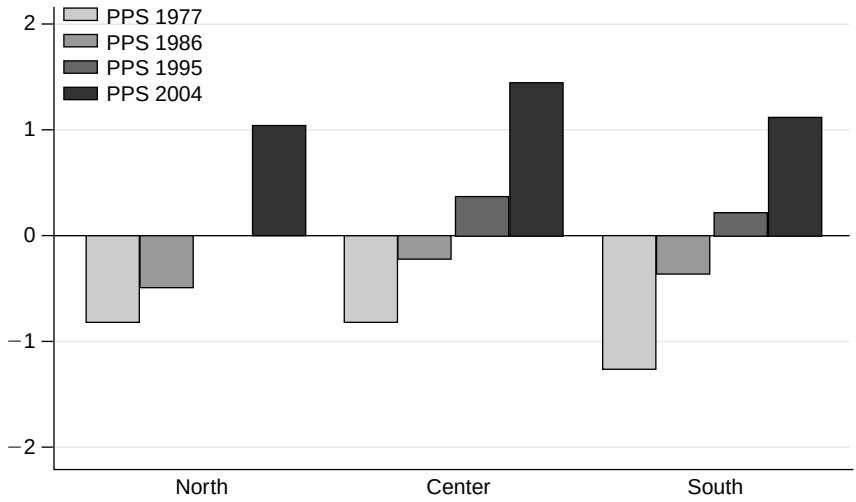


Figure 12.4 Long-term evolution of the private provision of services index by area (source: elaboration on various sources, see Table 12.1).

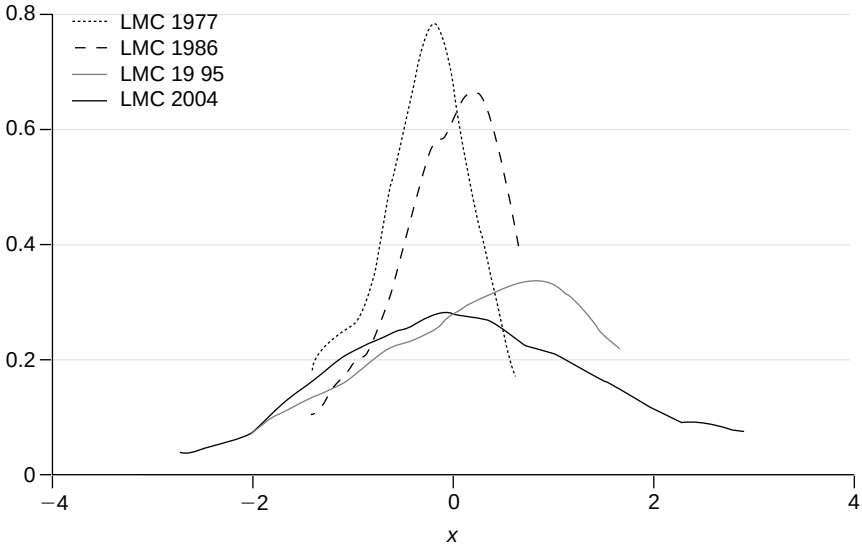


Figure 12.5 Long-term evolution of the local macroeconomic conditions index (source: elaboration on various sources, see Table 12.1).

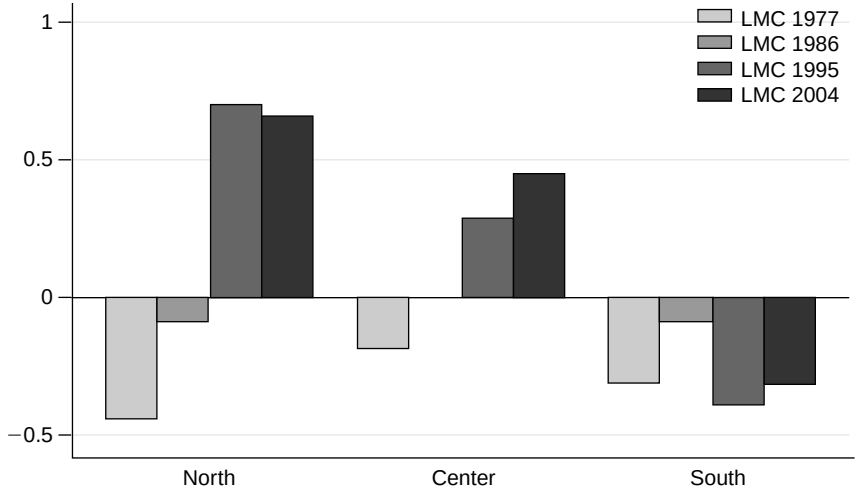


Figure 12.6 Long-term evolution of the LMC index by area (source: elaboration on various sources, see Table 12.1).

impact of gender on employment. In a sense, they are part of the process of the social production of gender diversity in the labor market and they thus constitute the "smoking gun" of the present analysis.

The econometric model

The econometric specification that will be considered in the next chapter consists of a probit model of the determinants of employment, with observed heterogeneity (that is observed explicative variables) at the individual (first) and regional (second) levels, and unobserved heterogeneity at the regional level (that is allowance for group-specific variance correlated to unobserved variables). As observations within groups (within a region) are more likely to be correlated than observations across different groups (across regions), failure to account for such second-level heterogeneity may lead to inconsistent estimates and misleading inferences. Hence, I implement generalized linear latent models to estimate a number of two-level random-coefficient probit models,[8] taking into account the nesting of individuals in their region of residence.

To introduce the model, let y_{ij} be the latent variable for individual i in region j. We observe the dichotomous response variable y_{ij}^*, assuming value 1 if the individual i in region j is employed, 0 otherwise. Let $\mathbf{x}_{ij}$ be a $r \times 1$ vector of individual and household characteristics (continuous or categorical, denoted by h) for the individual i in region j; and $\mathbf{z}_j$ be a $t \times 1$ vector of characteristics for each region j (denoted by m), summarized by the three factors obtained through the principal component analysis described above. Finally; let U_{0j} be the regional random effect, or the level-two residual for region j, U_{0j} is iid ~ $N(0, \sigma_U^2)$; and similarly let ε_{ij} be a random variable normally distributed with mean zero and constant variance, iid ~ $N(0, \sigma_\varepsilon^2)$, the level-one (individual) residual. U_{0j} and ε_{ij} are assumed to be independent of anything else.

Let us define α_j the $r \times 1$ vector of regression coefficients on the level-1 explanatory variables $\mathbf{x}_{ij}$ of the ith unit in region j, and γ_{0j} the regional intercept. The random-coefficient model is composed by a level-one model (the individual level):

$$y_{ij} = \gamma_{0j} + \mathbf{x}'_{ij}\alpha_j + \varepsilon_{ij}, \tag{1}$$

and a level-two model (the regional level):

$$\gamma_{0j} = b_0 + \mathbf{z}'_j b_j + U_{0j}$$

$$\alpha_j = a_0 + \mathbf{z}'_j a + U_j \tag{2}$$

The coefficient on level-one variables varies across regions according to a stochastic component U_j ($r \times 1$ vector), and a deterministic component $\mathbf{z}'_j a$, where a is a $r \times t$ matrix of the deterministic component of region-specific coefficients on the level-two variables; a_0 is a $r \times 1$ vector. I assume that α_j depends on the same

three factors as the regional intercept. Hence, the combined random-coefficient model is given by:

$$y_{ij} = b_0 + \mathbf{z}'_j b_j + \mathbf{x}'_{ij}(a_0 + \mathbf{z}'_j a + U_j) + \varepsilon_{ij} \tag{3}$$

There are $r+1$ random coefficients: U_{0j} and $\mathbf{U}_{hj}$ (they denote respectively the random parts of the intercept and of the coefficients). Assuming that the vector $U_{hj} = (U_{0j}, \ldots, U_{rj})$ has a multivariate normal distribution with zero mean and constant covariance matrix, the probability of being employed for the individual *i* in region *j* can be expressed as:

$$\Pr(y_{ij} = 1) = \Phi[b_0 + \mathbf{z}'_j b_j + \mathbf{x}'_{ij}(a_0 + \mathbf{z}'_j a)] = \Phi(\Theta) \tag{4}$$

where **Pr** is probability and Φ is the probit function, the cumulative distribution function of the standard normal distribution. b_0, b_j, a_0, a are estimated by maximum likelihood. The likelihood function for an individual *i* in region *j*, conditioned to a value for U_{0j} and U_{hj} is:

$$L_{ij}(\Theta|U_{0j}, \mathbf{U}_j) = \{\Phi[b_0 + \mathbf{z}'_j b_j + \mathbf{x}'_{ij}(a_0 + \mathbf{z}'_j a)]^{y_{ij}}\} \cdot \{1 - \Phi[b_0 + \mathbf{z}'_j b_j + \mathbf{x}'_{ij}(a_0 + \mathbf{z}'_j a)]^{1-y_{ij}}\}. \tag{5}$$

The likelihood function, for an individual *i* in region *j*, integrating out the random terms U_{0j} and U_{hj} reads:

$$L_{ij} = \int_{-\infty}^{+\infty} \{\Phi[b_0 + \mathbf{z}'_j b_j + \mathbf{x}'_{ij}(a_0 + \mathbf{z}'_j a)]^{y_{ij}}\} \cdot \{1 - \Phi[b_0 + \mathbf{z}'_j b_j + \mathbf{x}'_{ij}(a_0 + \mathbf{z}'_j a)]^{1-y_{ij}}\}$$
$$\varphi_j(\mathbf{U}_j) d(\mathbf{U}_j) \varphi_j(\mathbf{U}_{0j}) d(\mathbf{U}_{0j}) \tag{6}$$

where $\varphi(\cdot)$ are the density functions of the random effects. Thus, the likelihood function is:

$$L(\Theta, \Omega) = \prod_{j=1}^{J} \prod_{i=1}^{N} \mathrm{L}_{ij} = \prod_{j=1}^{J} \prod_{i=1}^{N} \int_{-\infty}^{+\infty} \{\Phi[b_0 + \mathbf{z}'_j b_j + \mathbf{x}'_{ij}$$
$$(a_0 + \mathbf{z}'_j a)]^{y_{ij}}\} \cdot \{1 - \Phi[b_0 + \mathbf{z}'_j b_j + \mathbf{x}'_{ij}(a_0 + \mathbf{z}'_j a)]^{1-y_{ij}}\} \varphi_j(\mathbf{U}_j) d(\mathbf{U}_j) \varphi_j(\mathbf{U}_{0j}) d(\mathbf{U}_{0j}) \tag{7}$$

In the estimation, the likelihood function is approximated via Gauss-Hermite quadrature.

An RUT interpretation

As discussed in Chapter 4, the first step in Mill's criticism of Bentham's utilitarianism (or at least of its crudest hedonistic interpretation) was to distinguish two potential interpretations of the statement that all behavior is driven by the search for pleasure and the avoidance of pain. One rather restrictive interpretation affirms that individuals systematically and coherently follow their self-interest and that no other drivers of behavior exist. I term this interpretation *deductive subjective utility theory* (DUT). The second interpretation, the *renaming subjective utility theory* (RUT),

affirms that individuals consistently follow their self-interest, provided we recognize as such anything that individuals do. Both interpretations may be applied to contemporary subjective utility theory. In Mill's and Schmoller's times the most common interpretation of early marginalist theories was of the DUT kind; that is, theories were assumed to imply a given list of pleasures (arguments of the utility function) in order to prove useful for prediction. However, with time the RUT interpretation took over, especially after the introduction of the revealed preference approach to subjective utility. Such an approach cannot be used for prediction (unless we also assume stability of preferences and a number of further restrictive hypotheses) because in order to know what an individual's self-interest is, we must first have observed their choices. However, it can be used as a way to formalize individuals' choices with the axioms of rationality as the only constraints; that is, with no limitation on the content of preferences. They may then be formulated in such a way as to account even for a social determination of preferences, almost turning upside down the interpretation and world-view underlying the introduction and earliest formulations of marginalism.

Thus, even the more general model depicted in Chapter 4 may be given an RUT interpretation, if we assume the subjective utility theory as formally representing only the link from individuals' will to their actions (see Figure 4.3); that is, with no implications for the content and formation of will. However, to interpret the model developed in this chapter according to such an approach it is necessary to make two additional hypotheses: (1) that employment status depends only on individuals' behavior – that is, labor supply; and (2) that behavior can always be represented as a process of individual rational choice that moreover must conform to the formal requirements necessary to allow for a utility representation of preferences (such as completeness, reflexivity, transitivity, and so on).

If such hypotheses were granted, the model would develop as follows. Consider an individual i living in region j, who maximizes her remaining lifetime utility by choosing, in each year t, whether or not to supply labor, y_{ijt}. Her remaining lifetime utility is given by:

$$V_{ijt}(S_{ijt}) = \max_{y_{ijt}} E\left[\sum_{t=\tau}^{T} d^{\tau-t} U_{ijt}(\cdot) S_{it}\right] \tag{8}$$

where τ is the theoretical start of the decision process, T is the end of the decision horizon, δ is the subjective time discount factor, and S_{ijt} is the state space at time t. S_{ijt} contains all the factors, exogenous and endogenous, known to woman i living in region j at time t, affecting the current utility or the probability distribution of future utility. $U_{ijt}(x)$ is the utility flow at time t and $V_{ijt}(S_{ijt})$ is the value function. The maximization problem in (8) can be cast in terms of alternative specific value functions, $V^{y}_{ijt}(S_{ijt})$, each following Bellman's equation – that is:

$$\begin{aligned} V_{ijt}(S_{ijt}) &= \max[V^{0}_{ijt}(S_{ijt}) V^{1}_{ijt}(S_{ijt})] \\ V^{y}_{ijt}(S_{ijt}) &= U_{ijt}(x) + \delta E(V_{ij,t+1}(S_{ij,t+1}) | y_{ijt}, S_{ijt}) \quad t < T \\ &= U_{ijt}(x), \quad t = T \end{aligned} \tag{9}$$

In $t < T$ the value of each choice combination is the current period utility flow plus discounted expected lifetime utility in time $t+1$. The state space in time $t+1$, $S_{ij,t+1}$, is updated according to the laws of motion of the endogenous state variables to be described below. In $t=T$, there is no future component to the alternative specific value functions. The utility flow $U_{ijt}(x)$ in (8) and (9) is assumed to be

$$U_{ijt}(x) = U_{ijt}(y_{ijt}, C_{ijt}, M_{ijt}, O_{ijt}, \varepsilon_{ijt}) \tag{10}$$

where C_{ijt} is consumption of the current period, M_{ijt} is a dummy variable equal to one if at time t the individual i living in region j is married, O_{ijt} is a dummy equal to one when at least one elderly person is present in the household. Let us suppose that utility is inter-temporally separable to leisure and that there are economy-wide factors that affect work choices.

To further justify the set of arguments in (16), consider the following linear utility function:

$$U_{ijt}(x) = \alpha \ln C_{ijt} + (\gamma_{0jt} + \gamma_{1jt} M_{ijl} + \gamma_{2jt} O_{ijt} + \varepsilon_{ijt}) y_{ijt} \tag{11}$$

where, ε_{ijt} is the level-one residual distributed as a normal with mean 0 and variance σ^2_{ε}. At each time, γ_{0j}, γ_{1j}, γ_{2j} are linear functions of the three aggregate measures *CD*, *PPS* and *LMC* (the aggregate factors developed within the previous analysis):

$$\begin{aligned}
\gamma_{0jt} &= \beta_{00t} + \beta_{01t} CD_{jt} + \beta_{02t} PPS_{jt} + \beta_{03t} LMC_{jt} + u_{0jt} \\
\gamma_{1jt} &= \beta_{10t} + \beta_{11t} CD_{jt} + \beta_{12t} PPS_{jt} + \beta_{13t} LMC_{jt} + u_{1jt} \\
\gamma_{2jt} &= \beta_{20t} + \beta_{21t} CD_{jt} + \beta_{22t} PPS_{jt} + \beta_{23t} LMC_{jt} + u_{2jt}
\end{aligned} \tag{12}$$

In (12), u_{0jt}, u_{1jt}, u_{2jt} are the regional-level random effects – that is, the level-two residuals for each region j – normally distributed with all means equal to 0 and variances σ^2_{u0}, σ^2_{u1}, σ^2_{u2}. First-level and second-level residuals are assumed to be independent.

In other words, with this model we would assume that the (dis)utility of being employed is affected by regional factors and family composition. In turn, the impacts on the utility of employment of these household-level variables (cohabiting with an elderly person and being married) are assumed to depend upon regional conditions as well. The direct regional impact constitutes the random-intercept component of the econometric model, whereas the impact of regional variables on the coefficients of individual variables constitutes the random-coefficient component of the model. It is maintained throughout the analysis that CD, PPS and LMC are taken as given by the individual decision maker. This may be justified by considering that these factors are determined mostly within the political process and by institutional and cultural dynamics that typically respond only slowly to changes in demand (a hypothesis similar to Mill's, that social changes require more time than individual decisions).

The per-period budget constraint in the lifetime utility maximization model is specified as:

$$w_{ijt}^{f} y_{ijt} + ar_{ijt} \geq C_{ijt} \tag{13}$$

where w_{ijt}^{f} is the woman's labor market earnings in year t, and ar_{ijt} is a proxy for non-labor income. Let labor market earnings be further determined by:

$$y_{ijt} = g(\mathbf{x}_{ij}, H_{ijt}) \tag{14}$$

where $g(\cdot)$ is a general function of the covariate vector $\mathbf{x}_{ijt}$. The vector of covariates $\mathbf{x}_{ijt}$ contains proxies for accumulated human capital since completing education. More specifically, the vector $\mathbf{x}_{ijt}$ is $\mathbf{x}_{ijt} = \{E_{ijt}, m_{ijt}, N_{ijt}\}$, where E_{ijt} is the education level at time t, m_{ijt} is a categorical variable for the size of the municipality of residence, and N_{ijt} is a dummy equal to one when the household includes at least one child aged less than three years. The laws of motion for the endogenous state variable in the dynamic program is:

$$H_{ij,t+1} = H_{ijt} + y_{ijt} \tag{15}$$

where the initial condition is $H_{ijt} = 0$. Accumulated actual work experience during the sample period is augmented by one for each period a woman chooses to work.

Following Del Boca and Sauer (2009), instead of adopting specific functional forms for $U_{ijt}(\cdot)$ and $g(\cdot)$, and solving the dynamic programming model numerically for exact decision rules, it is possible to characterize the approximate decision rules of the general model. The first step in the characterization of approximate decision rules involves substituting women's wages into the budget constraint and then substituting the budget constraint into the choice-specific $U_{ijt}(\cdot)$'s. This yields a distinct choice-specific state space $S_{ijt}^{0}(\cdot)$ for each work alternative.

For example, consider the basic structure of the model, the linear utility function in (11), and the state dependence equation in (12). Substitution yields the following S_{ijt}^{y}'s:

$$\begin{aligned} S_{ijt}^{0} &= \{ar_{ijt}\} \\ S_{ijt}^{1} &= \{\mathbf{x}_{ijt}, H_{ijt}, m_{ijt}, N_{ijt}, ar_{ijt}, \varepsilon_{ijt}^{f}, \varepsilon_{ijt}^{l}, M_{ijt}CD_{jt}, O_{ijt}CD_{jt}, M_{ijt}PPS_{jt}, \\ &\quad O_{ijt}PPS_{jt}, M_{ijt}LMC_{jt}, O_{ijt}LMC_{jt}\} \end{aligned} \tag{16}$$

According to (16), each decision rule will depend on the entire state space S_{ijt} because the value of any choice is computed by comparing it to the values of the other choice. S_{ijt} is the union of the S_{ijt}^{y}'s where

$$\begin{aligned} S_{ijt}^{y} = \{&\mathbf{x}_{ijt}, H_{ijt}, m_{ijt}, N_{ijt}, ar_{ijt}, \varepsilon_{ijt}^{f}, \varepsilon_{ijt}^{l}, M_{ijt}CD_{jt}, O_{ijt}CD_{jt}, M_{ijt}PPS_{jt}, \\ &O_{ijt}PPS_{jt}, M_{ijt}LMC_{jt}, O_{ijt}LMC_{jt}\} \end{aligned} \tag{17}$$

To see this and without loss of generality, consider the myopic version of the model. In the myopic version, there is no future component to the alternative specific value functions for $t \leq T$, i.e. $\delta = 0$. Denote $d^1_{ijt} = 1$ if alternative $y_{ijt} = 1$ is chosen and $d^0_{ijt} = 1$ otherwise. Utility maximization implies the following comparison of utility flows in each period t:

$$d^0_{ijt} = 1 \text{ when } U_{ijt}(0) - U_{ijt}(k) > 0,\ k \neq 0 \text{ or } F^0_{ijt}(S_{ijt}) > 0$$
$$d^1_{ijt} = 1 \text{ when } U_{ijt}(1) - U_{ijt}(k) > 0,\ k \neq 1 \text{ or } F^1_{ijt}(S_{ijt}) > 0 \tag{18}$$

Estimating approximate decision rules is accomplished by choosing a functional form for $\Pr(d^y_{ijt} = 1) = \Pr(F^y_{ijt}(S_{ijt}) > 0)$. Estimation of the approximate decision rules of the optimization model proceeds by specifying $\Pr(F^y_{ijt}(S_{ijt}) > 0)$ in the following way:

$$\Pr(d^y_{ijt} = 1) = \Phi_{ijt}$$

$$\begin{pmatrix} \beta_{00t} + \beta_{01t} CD_{jt} + \beta_{02t} PPS_{jt} + \beta_{03t} LMC_{jt} + u_{0jt} + \beta_{10t} M_{ijt} + \beta_{11t} CD_{jt} M_{ijt} + \\ + \beta_{12t} PPS_{jt} M_{ijt} + \beta_{13t} LMC_{jt} M_{ijt} + u_{1jt} M_{ijt} + \beta_{20t} O_{ijt} + \beta_{21t} CD_{jt} O_{ijt} + \beta_{22t} \\ PPS_{jt} O_{ijt} + \beta_{23t} LMC_{jt} O_{ijt} + u_{2jt} O_{ijt} + \gamma_{3t} ar_{ijt} + \gamma_{4t}\, \mathrm{x}_{ijt} + \gamma_{5t} H_{ijt} + \varepsilon^v_{ijt} + \eta^v_{ijt} \end{pmatrix} = \Phi_{ijt}(\Theta)$$

$$\Pr(d^y_{ijt} = 0) = 1 - \Phi_{ijt}(\Theta) \tag{19}$$

where Pr, as in the previous section, is probability and Φ is the probit function, the cumulative distribution function of the standard normal distribution. The β are estimated by maximum likelihood.

The likelihood function for woman i in region j at time t, conditioned to u_{0jt}, u_{1jt}, u_{2jt} is:

$$L_{ijt}(\Theta | u_{0jt}, u_{1ji}, u_{2jt}) = [\Phi(\Theta)]^{y_{ijt}} [1 - \Phi(\Theta)]^{1 - y_{ijt}} \tag{20}$$

The likelihood for individual i in region v, integrating out the random term u_{0jt}, u_{1ji}, u_{2jt} reads:

$$L_{ijt}(\Theta) = \int_{-\infty}^{+\infty} [\Phi(\Theta)]^{y_{ijt}} [1 - \Phi(\Theta)]^{1 - y_{ijt}} \varphi_j(u_{0jt}) d(u_{0jt}) \varphi_j(u_{1jt}) d(u_{1jt}) \varphi_j(u_{2jt}) d(u_{2jt}) \tag{21}$$

where $\varphi(\cdot)$ are the density functions of the corresponding random effects. Suppose the data set contains T individuals (first-level units) and R regions (second-level units). Then, the likelihood function reads:

$$\prod_{j=1}^{R} \prod_{i=1}^{T} \mathrm{L}_{ij}(\Theta) = \prod_{j=1}^{R} \prod_{i=1}^{T} \int_{-\infty}^{+\infty} [\Phi(\Theta)]^{y_{ijt}} [1 - \Phi(\Theta)]^{1 - y_{ijt}} \varphi_j(u_{0jt}) d(u_{0jt}) \varphi_j$$
$$(u_{1jt}) d(u_{1jt}) \varphi_v(u_{2jt}) d(u_{2jt}) \tag{22}$$

– which is the same as that shown above, and as mentioned it is approximated via the Gauss–Hermite quadrature.

In sum, the main theoretical point is that the parameters in (11) and (12) have straightforward mainstream economic interpretations: γ_{0jt} is the marginal utility of working in year t, reflecting the utility cost of worker effort; γ_{1jt} is the marginal change in the (dis)utility of working when the individual in question is married.[9] Similarly, γ_{2jt} is the marginal change in the utility function of workers when there is a person older than 70 in their household. Note that γ_{0j}, γ_{1j}, γ_{2j} are modeled in (12) to be (stochastic) functions of the institutional environment. Thus, equation (12) is important for clarifying the logic of the approach of inferring the effect of social policies and the institutional environment on individual's labor supply. In this framework, socioeconomic variables, policies and institutions influence the utility cost of worker effort and the degree to which care burdens and family characteristics affect individual's employment.

An assessment

There may be two interpretations of the model proposed here. According to the first, it is assumed that individuals' employment status is correlated with both individual/household and contextual/social factors, and that these two levels interact, producing a final compound effect. None of these factors necessarily represent labor demand or supply only; we only observe the final matching between workers and firms and we have no information on what factors underlie, for example, the systematic impact of marital status: it may be a worker's choice to reduce working time once married, or it may be a firm's choice to be less inclined towards hiring married individuals. From this point of view, the impact of GDP growth is particularly relevant because it may imply workers' choices to supply less labor in phases of depression – possibly because wages are smaller, as predicted by new-classical explanations of unemployment, or because firms decide to hire fewer workers because they face a smaller aggregate demand, as a Keynesian interpretation would imply. Thus, the model seems sufficiently flexible to accommodate its adoption within several, even opposing, economic schools.

Under the second interpretation, instead, the model implies a theory of individual behavior where individual preferences and constraints are mediated by the institutional and economic setting. In the determination of the factors contributing to individual employment status it allows for factors from different levels (micro and macro) to interact with each other, but this time the interpretation is that social factors only matter when influencing workers' choices; that is, as arguments of their utility function or as components of their budget constraint. In other words, along Benthamite lines, this interpretation implies that society only matters when it modifies the incentives that individuals face. Such an RUT interpretation highlights how on the one hand subjective utility theory is rather restrictive, being usually associated with explanations of employment solely in terms of labor supply (though not necessarily so, as in the case of market frictions or failures). On the other hand, it is so general as to accommodate for almost a dismissal of the basic elements of the method and pre-analytical vision

that were originally associated with it, namely methodological individualism and the *homo economicus* hypothesis. These are not formally violated by the RUT model developed above, but its economic interpretation certainly challenges their evocative value (and possibly their ideological content) in defining the pre-analytical vision of the economy and society envisaged by the marginalist approach. Indeed, the relation between pre-analytical vision, theory of behavior and economic methodology emerges as one of the main issues left open to further examination by the analysis in this work.

As will be shown in the next chapter, individuals do not simply appear as self-made adults and social conditions do contribute to the determination of their behavior. Yet, even a model in which, for example, society's development of a gender-aware civic culture affects women's employment status is liable to interpretation in terms of subjective utility theory. Thus, such theory manifests itself possibly as more an all-encompassing black box than Mill thought. However, this observation does not imply that subjective utility theory is a tool without an underlying theory, or a way to formalize any economic process as being compatible with any economic school. An RUT interpretation, even of a multilevel model of employment such as that developed here, still implies restrictive hypotheses: (1) the visualization of employment as a matter of purely individual behavior; (2) the subsumption of all individual behavior to a choice process; (3) the requirement that choice is consistently instrumentally rational, in the specific sense that it has to allow for a utility representation (thus preferences must be complete, rational and satisfy the weak axiom of revealed preferences).

13 Analysis of men's and women's employment

The use of multilevel modeling allows us to control in the estimation for possible interactions between micro and macro factors that would make the separate estimation of the different levels of impacts unfeasible under linear regressions (see Chapter 12). As a consequence, each variable may exert two impacts upon employment: a direct and an indirect one. The idea of a direct impact is straightforward; it implies that both micro and macro variables may be systematically correlated with higher (and lower) individual probabilities of being employed. An indirect impact may be in place when macro variables modify the impact of individual characteristics on employment. For example, the availability of childcare facilities may affect the impact on women's employment of having a child.

As mentioned, the econometric specification consists of a multilevel analysis based on a probit model of the determinants of employment with observed heterogeneity (that is, explanatory variables) at the individual (first) and regional (second) levels. I also include unobserved heterogeneity at the regional level; that is, a region-specific systematic deviation that is not accounted for by the three indexes developed in the previous chapter. Based on the literature reviewed in the previous two chapters, I propose three hypotheses concerning the role of macro factors, especially in relation to women's employment since, as shown in Chapter 11, it proves significantly more variable than men's. These hypotheses assert that there is a direct effect exerted by macro factors on individuals' employment status – that is, contextual conditions systematically affect women's average regional employment rates:

H_1: Regions with more advanced policies on equal opportunities and more liberal cultural norms towards gender roles exhibit higher employment rates for women.

H_2: Regions with more extensive social policies in terms of public services for the conciliation of work and family life exhibit higher employment rates for women.

H_3: Regions with higher macroeconomic growth exhibit higher employment rates for women.

To test the first hypothesis, I measure the effectiveness of policies for gender parity in the labor market by the absence of relevant barriers to entry against women. The two issues of gender-based discrimination and cultural norms are considered together because the absence of gender discrimination provides ideological support to a dual-earner household model and by providing more equal labor incomes it reduces the financial incentive to have only women do all the unpaid work. For its ability to summarize the common components of gender-based discrimination and of the cultural environment with respect to gender, I summarize H_1 with the assumption of a positive impact of the index of regional gender-aware civic development (CD).

I frame the second hypothesis in terms of public services, in order indirectly to test the associated hypothesis that a commodification of care activities (as summarized by the market provision of such services) is negative for women's employment. Thus, H_2 is summarized by the assumption that the index of private provision of services to households (PPS) exerts a negative impact on women's employment. By contrast, a positive correlation between the two variables would indicate that the market provision of services is beneficial to the employment of women by reducing their care and housework burden, a belief commonly held by the mainstream literature.[1]

Finally, in the third hypothesis I test a widely diffused tenet of mainstream economics literature, namely that women's labor supply exhibits a higher elasticity to the business cycle than men's. If H_3 is correct, the index of local macroeconomic conditions (LMC) will exhibit an impact on women's employment consistently positive and higher than men's.

However, due to the centrality of interaction terms between micro and macro variables in supporting and justifying the approach proposed here, I investigate three further hypotheses to predict how macro variables affect the association between women's individual characteristics and their involvement in market work. In other words, the model allows for the impact of the macro factors to be different across individuals within a single region. It is thus assumed that:

H_4: Macro variables significantly affect the impact of individual and household characteristics on women's employment.

H_5: In regions with more advanced policies on equal opportunities and more liberal cultural norms towards gender roles, paid and unpaid work burdens are more evenly distributed within the household.

H_6: In regions with more extensive social policies in terms of public services for the conciliation of work and family life, housework and family-related responsibilities have a weaker effect on women's involvement in market employment.

On the whole, these hypotheses state that the same macro factors mentioned above exert an indirect effect on women's employment (H_4) by affecting the relevance for women of having started a family (H_5) or by reducing the constraint of their unpaid work burdens (H_6).

I capture the negative effect on women's employment arising from joining a household and having to carry out unpaid work by using the impact of a dummy variable, "married" – by which, as mentioned, in fact I mean any long-term emotional partnership that involves cohabitation. Thus, under H_5 I test for a negative interaction between "married" and the index of civic development (CD).

I capture the detrimental impact on women's employment arising from unpaid work burdens by analyzing the impact of cohabiting with an elderly person (above seveny-five years old) as a proxy for eldercare burden. Thus, under H_6 I test for a negative interaction between a dummy variable, "elderly", and the index of private provision of services to households (PPS). In the face of the ongoing dramatic aging of the population in Europe, I deem cohabiting with an elderly person a better stand-in for care burdens than having children, for two reasons. On the one hand, it is less affected by endogeneity issues that may arise in the estimation as a consequence of the possible causal relationship between labor market status and the rational choice of having a child.[2] On the other hand, it captures the increasing relevance of public policies aimed at meeting the increased demand for long-term care and assistance. These considerations are validated by the empirical finding that having children exerts an ambiguous and often not significant impact on women's employment, as noted for example by Haas *et al.* (2006) or Del Boca and Sauer (2009), and as emerging from the descriptive preliminary analaysis conducted in Chapter 11.

Thus, overall I assume that the three macro indexes developed in the previous section (CD, PPS and LMC) will exert a direct effect on women's employment and an indirect effect by interacting with two individual characteristics, namely cohabiting with a partner (the variable "married") or with an elderly dependent person (the variable "old aged"). By contrast I assume that all other individual variables included in the analysis exert an effect that is independent from the contextual variables. Specifically, I assume that the impact of education on women's employment is substantially homogeneous across regions. This hypothesis arises from the observation that employment levels of more educated women are similar across Italy's regions, and the reward for human capital investments in terms of employability does not appear to be related to the institutional context (see Chapter 11).

Results

As noted in Chapter 11, I ran estimations on the whole sample, including men and women (referred to as pooled estimations) and on men and women separately. In the former case the implicit assumption is that men and women behave according to the same model apart from some parametric heterogeneity, which I

summarize in the form of a constant – the "woman" dummy variable. Under separate estimations, by contrast, it is allowed for different behavioral models to be most suited to men and women. Still, also in this case I shall use a similar model in order for differences to emerge from the estimations inductively, in the form of different variables exerting significant impacts on women's and men's employment, or same variables exerting different impacts.

By first considering the pooled estimations it is possible to assess the relevance of gender heterogeneity. As shown in Table 13.1 the three macro factors developed in the previous chapter apply a significant impact on individuals' likelihood of being employed, though their specific contribution has been rather variable over the 30-year period. Regional economic growth (LMC) seems to be a factor more consistently conducive to higher employment, as measured by its marginal effects (that is, the average change in individuals' probabilities stemming from a 1 percent change in the independent variable). By contrast, CD and PPS exhibit a couple of problematic sign reversals and their coefficients are not always statistically significant. As discussed below, these ambiguous results will however reduce when proceeding with separate estimates, thus supporting the view that gender-specific processes may be in place and separate gender-specific estimations are necessary.

As predicted by most of the literature (summarized in Chapter 11), the impact of individual characteristics is highly significant. Specifically, cohabiting with an elderly person negatively affects the probability of being employed, while being married appears to be irrelevant. Education exerts the usual positive impact on the likelihood of being employed, though with a decreasing historical trend in the period considered.[3]

However, the most interesting results concern the dummy variable "woman". In the estimates, its impact remains significantly negative during the whole period (with a marginal effect ranging between –50% and –70%), even after controlling for individual and macro variables. In other words, when allowing for observable individual characteristics women's employment is lower than men's even more than the raw difference in the aggregate employment rates, which, as shown in Chapter 11, range between –30% and –60%.

Thus, when gender heterogeneity is the reference conceptual model, women exhibit a systematically lower probability of being employed that is not explained either by individual nor household characteristics. Table 13.2 shows the detailed breakdown of the impact of the three macro-factors and of the regional intercepts on the coefficient of the dummy variable "woman". These second-level impacts measure the extent to which the macro factors are able to explain the part of the gender heterogeneity that individual and household characteristics are not able to account for.

As it emerges, the impact of being female on the likelihood of employment is significantly correlated to the three macro factors considered, as shown by the significance of CD, PPS and LMC in many estimations. *Ceteris paribus* the negative impact on employment of being woman is partly mitigated in the regions with a larger index of CD, as shown by the positive coefficients for the

Table 13.1 Pooled estimation: two-level probit regression, marginal effects

	1977	*1986*	*1995*	*2004*
Level 1 units	4,357	9,620	10,350	8,716
Level 2 units	19	19	19	19
Log-likelihood	–13,377,881	–10,847,353	–13,634,410	–12,414,468
Primary education	0.39	0.643	–0.22	0.009
	*0.103***	0.111**	*0.16*	*0.172*
Lower secondary education	0.986	1.046	0.165	0.353
	*0.154***	0.215**	*0.158*	*0.121***
Upper secondary education	1.233	1.312	0.525	0.722
	*0.126***	0.227**	*0.167***	*0.121***
College education	1.591	1.439	0.824	1.084
	*0.233***	0.221**	*0.21***	*0.21***
Woman	–0.706	–0.539	–0.577	–0.639
	*0.07***	0.148**	*0.123***	*0.098***
Regional variance	–0.665	–1.009	–0.35	–0.304
	*0.06***	0.099**	*0.119***	*0.102***
Married	–0.041	0.319	–0.008	–0.14
	0.049	*0.111***	*0.089*	*0.085**
Old-aged cohabiting	–0.11	0.424	–0.459	0.055
	*0.031***	0.119**	*0.092**	*0.048*
CD	0.075	–0.030	–0.014	–0.001
	*0.008***	0.013**	*0.021*	*0.015*
PPS	–0.108	0.117	–0.017	–0.109
	*0.022***	0.033**	*0.03*	0.016**
LMC	–0.071	–0.001	0.041	0.129
	*0.036***	0.026	*0.01**	*0.005***

Source: Elaboration on SHIW (various years), sample restricted to age bracket 25–54, and various sources (see Table 12.1).

Notes
* statistically significant at 5%; ** statistically significant at 1%.
Other control variables: Real wealth, age, age squared, urban size (four dummy variables).

Table 13.2 Details of the second level: the influence of the macro factors on the coefficient of the dummy variable "Woman"

	1977	*1986*	*1995*	*2004*
Woman: st. dev.	0.255	0.295	0.257	0.296
	*0.016****	*0.032****	*0.033****	*0.022****
Regional intercept	–0.855	–0.576	–0.541	–0.762
	*0.072****	*0.157****	*0.114****	*0.103****
CD	0.016	0.125	0.106	0.260
	–0.026	*0.028****	*0.032****	*0.035****
PPS	–0.089	–0.054	–0.133	0.096
	*0.045***	*0.041**	*0.061***	*0.026****
LMC	–0.183	–0.240	0.006	0.172
	*0.063****	*0.058****	*–0.019*	*0.013****

Source: Elaboration on SHIW (various years, sample restricted to age bracket 25–54) and various sources (see Table 12.1).

Notes
*** statistically significant at 1%; ** statistically significant at 5%; * statistically significant at 10%.

interaction between being female and CD. It is noteworthy that this interaction effect seems to have strengthened over time, as shown by the increasing magnitude of its coefficient (from 0.016 in 1977 to 0.260 in 2004). Instead, the coefficients of the interaction terms between being female and PPS and LMC are less consistently significant and unstable over the period of analysis. They were negative in 1977 and became significantly positive in 2004. Regions' unobserved heterogeneity (that is residual region-specific variance that the three indexes are unable to explain) is significantly high throughout the period. Thus, the explanation for women's disadvantage in the labor market may require the consideration of even further contextual variables in the analysis.

However, throughout the period there are regional systematic deviations in the coefficient of the "woman" dummy variable that the three factors are unable to account for, as manifested in the (statistical and quantitative) significance of the regional intercepts. As Table 13.1 shows, region-specific unexplained effects also exert a significant compound impact (directly upon the dependent variable and indirectly upon the other variables' coefficients) upon the probability of being employed, thus suggesting that the whole model is only capable of predicting part of the observed phenomena and it does not exhaust every possibility.

Proceeding to the separate estimations carried out on men's and women's samples, it is immediately observable that the results are substantially different from those for the population average (as summarized by the pooled sample) and thus the representative agent model may be particularly unfit to explain employment patterns.

As shown in Tables 13.3 and 13.4, it becomes apparent that unexplained region-specific dynamics exert a greater impact on men, but they are at the same time more variable, implying that the respective coefficient is not always statistically significant. Throughout the period education is confirmed as the

Table 13.3 Estimation on women: two-level probit regression, marginal effects

	1977	*1986*	*1995*	*2004*
Level 1 units	2,863	4,928	5,274	4,476
Level 2 units	19	19	19	19
Log-likelihood	–8,348,920.7	–6,689,871.7	–7,683,671.9	–7,786,147.7
Primary education	0.528	–0.16	0.143	1.101
	*0.122****	*0.12***	*0.232*	*0.337****
Lower secondary education	1.283	0.705	0.595	1.437
	*0.192****	*0.170****	*0.28***	*0.371****
Upper secondary education	1.542	1.011	1.109	1.857
	*0.13****	*0.160****	*0.29****	*0.372****
College education	2.062	1.152	1.463	2.306
	*0.207****	*0.166****	*0.311****	*0.368****
Regional variance	–2.703	–0.122	–5.198	–1.443
	*0.615****	*0.142*	*0.591****	*0.366****
Married	–0.225	–0.096	–0.221	–0.063
	*0.079****	*0.070***	*0.048****	*0.029****
Old-aged cohabiting	0.164	–0.147	–0.16	–0.393
	*0.064***	*0.073****	*0.041****	*0.045****
CD	0.092	0.018	0.041	0.385
	*0.016****	*0.014**	*0.024**	*0.020****
PPS	–0.147	–0.095	–0.125	–0.120
	*0.026****	*0.029****	*0.042****	*0.014****
LMC	–0.104	–0.036	0.07	0.065
	*0.041***	*0.037****	*0.02****	*0.004****

Source: Elaboration on SHIW (various years, sample restricted to age bracket 25–54) and various sources (see Table 12.1).

Notes
* statistically significant at 10%; ** statistically significant at 5%; *** statistically significant at 1%.
Other control variables: real wealth, age, age squared, urban size (four dummy variables).

Table 13.4 Estimation on men: two-level probit regression, marginal effects

	1977	*1986*	*1995*	*2004*
Level 1 units	1,494	4,910	5,076	4,240
Level 2 units	19	19	19	19
Log-likelihood	2,110,033.1	2,940,017.3	–4,657,964.9	–2,794,929.0
Primary education	0.539	1.252	0.049	0.961
	*0.214***	*0.777*	*0.365*	*0.222****
Lower secondary education	1.066	1.886	0.608	1.445
	*0.203****	*1.1**	*0.24***	*0.199****
Upper secondary education	1.137	1.982	0.506	1.579
	*0.224****	*1.077**	*0.253***	*0.178****
College education	0.81	1.362	0.47	1.264
	*0.348***	*0.693***	*0.317*	*0.16****
Regional variance	–8.48	0.568	0.454	–8.342
	*1.061****	*0.978*	*0.341*	*1.102****
Married	0.041	1.518	0.601	0.199
	0.085	*0.358****	*0.061****	*0.084***
Old-aged cohabiting	–0.384	–1.661	0.022	–0.081
	*0.105****	*0.733***	*0.124*	*0.039***
CD	–0.117	–0.481	–0.076	0.089
	*0.023****	*0.336*	*0.023****	*0.021****
PPS	0.237	–1.054	0.184	0.06
	*0.046****	*0.699*	*0.039****	*0.027***
LMC	0.384	0.458	–0.008	0.057
	*0.075****	*0.36*	*0.021*	*0.011****

Source: Elaboration on SHIW (various years, sample restricted to age bracket 25–54) and various sources (see Table 12.1).

Notes
* statistically significant at 10%; ** statistically significant at 5%; *** statistically significant at 1%.
Other control variables: real wealth, age, age squared, urban size (four dummy variables).

single most relevant individual characteristic determining employment, for women more than for men. For women, its impact is greater than that found in the pooled sample and monotonically increases over time. For men, it exhibits the non-monotonic shape observed in Chapter 11, whereby the probability of employment increases with educational attainments at all levels except in the case of tertiary education.

As opposed to what was found in the pooled sample, being married significantly decreases women's probability of being employed (its impact varies between –9.6% in 1986 and –27% in 2004) and it conversely increases men's probability (though its impact reduces over time). This specular trend highlights the role of gender roles and family-related responsibilities in a very significant way and, as mentioned in Chapter 11, it seems to confirm Schmoller's hypothesis of a complementarity between some member of the household's unpaid work at home and the other member's formal employment in the "public sphere".

In contrast, the impact of cohabiting with an elderly person significantly varied during the period for women, while it was nearly always negative for men. Interestingly, for women it exhibits a positive coefficient in 1977, and increasingly negative coefficients in the following years. This gradual shift may depend on the changing family structure and specifically on the shift from extended families – where it may be assumed that the elderly were actively involved in home production and unpaid labor (for example, care for the children) – to the nuclear family, where the elderly return as recipients of informal long-term care (see, for example, Letner, 2003; Saraceno, 2010).

On the whole, the results concerning the macro indicators are consistent with some of the hypotheses listed in the previous paragraph concerning women's employment, though with relevant exceptions. Specifically, gender-aware civic development (CD) exerts an unambiguously positive effect on women's employment. It is the most relevant contextual variable and at the end of the period (2004) it peaks, reaching a +38.5% marginal impact. Thus the first hypothesis (H_1) is confirmed. Interestingly, the index of private provision of services (PPS) systematically reduces women's probability of being employed, thus confirming H_2 and contradicting the idea that women's employment benefits from the extension of the services sector rather than from social policy. Finally, the impact of macroeconomic growth (LMC) that was systematically positive in the pooled sample is now ambiguous: negative in 1977 and 1986, and positive in 1995 and 2004. We can thus reject the hypothesis that women's employment unambiguously responds to business cycles, and a fortiori that it does so more than men's (rejecting H_3).

The specific results in terms of the role of tertiarization and GDP growth are worthy of further comment. First, the public provision of social assistance is a component of the CD index, positively correlated to women's employment, but it is also negatively correlated to PPS, the index of the private provision of services, which is in turn negatively correlated to women's employment. The first piece of evidence may confirm a result already present in the literature on in-kind social transfers proving more effective in sustaining women's employment than monetary transfers. However, the latter finding may contradict the

traditional view on the existence of a trade-off between the policy objectives of increasing women's employment rates and reducing segregation (see, for instance, Bettio and Verashchagina, 2009). This hypothesis is based on the finding that, among developed countries, those exhibiting high levels of women's employment also exhibit high levels of gender segregation, and vice versa. The hypothesis is therefore based on the evidence of aggregate data. However, the analysis of Italy's regions shows that (1) no significant correlation appears to emerge on the aggregate by comparing Italy's regions, as shown in Figure 13.1 below (if anything, the relation would be slightly negative); and (2) when adopting the specific technique used here, considering macrodata and microdata simultaneously, a negative net impact of segregation on women's employment becomes apparent. A possible explanation of this finding, in light of the analyses developed in the rest of the book, is that gender segregation carries with it a cultural effect of conferring to the labor market the traditional gender roles and stereotypes, and/or an economic impact. This could reinforce the traditional sexual division of labor, with women providing only for certain activities (e.g. care), either at home or in the market, which are frequently undervalued and discriminated against.

Second, the index measuring macroeconomic conditions, LCD, was found to exert a significant positive effect only on men's employment (and a statistically significant, though small, effect on the pooled sample). This result may suggest that a fresh look at both the real and employment consequences of the current

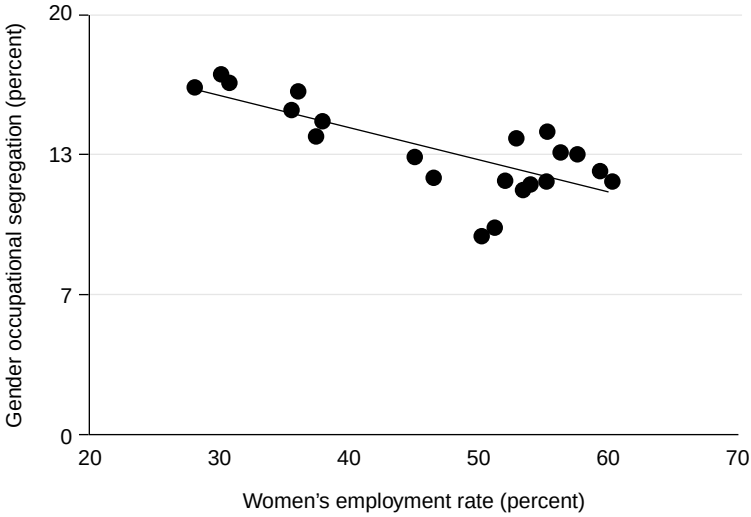


Figure 13.1 Correlation between gender occupational segregation and women's employment rate in Italy's regions (source: elaboration on various sources, see Table 12.1).

Note
Year 2004.

economic crisis is required. Indeed, while traditional gender roles would include the role of the man as breadwinner, often providing the only income for a household, it emerges from the analysis that men's employment is at greater risk during recessions, as it may be the case that women's segregation in the labor market has the (possibly unintended) side effect of gathering the majority of women working in more stable industries and/or safer jobs (for example, as civil servants). Indeed, the result that favorable macroeconomic conditions (LMC) significantly affect only men's (and the average) probability of being employed may possibly be due to men's employment in the more labor-intensive industries, characterized by a higher correlation of labor demand to aggregate demand, as suggested by Glenn, Melis and Withers (2009). However, Singh and Zammit (2000) claim that the opposite is true for developing countries, where a tendency prevails for women to be more often employed in the relatively more unstable industries, such as the tourism, textile and agricultural export sectors (see Antonopoulos, 2009). Concerning the current macroeconomic crisis, Smith (2009) suggests that mixed evidence is only gradually emerging and that it is too early to draw any conclusions. However, this finding of the present research suggests at the very least that no faith can be placed in the belief that aggregate growth (and tertiarization of the economy) will automatically boost women's employment and address any gender imbalances. Ad hoc policies, or the modification of the cultural and social environment, appear instead to be more useful.

Finally, concerning the details of the second level (reported in Tables 13.5 and 13.6 concerning women's estimations), I find that the three macro indexes exert a large and statistically significant impact on the coefficient of the two dummy variables on many occasions. Thus, the crucial hypothesis H_4 is confirmed.

In particular, the index of gender-aware civic development does not exert a statistically significant impact on the coefficient of being married, only becoming significantly negative at the end of the period (thus providing some partial

Table 13.5 Details of the second level: the influence of the macro factors on the coefficient of the dummy variable "being married"

	1977	*1986*	*1995*	*2004*
Married: st. dev.	0.310	0.444	0.220	0.192
	*0.036***	*0.025***	*0.024***	*0.011***
Regional intercept	–0.190	0.156	–0.230	–0.025
	*0.090***	*0.078***	*0.050***	*0.054*
CD	0.063	–0.086	–0.024	–0.142
	*0.037**	*0.053*	*0.028*	*0.034***
PPS	–0.016	0.146	–0.025	–0.042
	0.068	*0.071***	*0.047*	*0.039*
LMC	0.215	–0.019	0.072	0.010
	*0.101***	*0.111*	*0.022***	*0.011*

Source: Elaboration on SHIW (various years), sample restricted to age bracket 25–54, and various sources (see Table 12.1).

Table 13.6 Details of the second level: the influence of the macro factors on the coefficient of the dummy variable "cohabiting with an old-aged dependent"

	1977	*1986*	*1995*	*2004*
Old-aged: std. dev.	0.178	0.344	0.418	0.373
	*0.016***	*0.024***	*0.034***	*0.027***
Regional intercept	0.564	–0.300	–0.202	–0.395
	*0.099***	*0.097***	*0.043***	*0.076***
CD	0.056	0.157	–0.097	0.556
	0.042	*0.036***	*0.039***	*0.032*
PPS	0.297	–0.391	0.122	0.032
	*0.066***	*0.070***	*0.062***	*0.037*
LMC	0.380	–0.141	0.052	0.059
	*0.068***	*0.055***	*0.026***	*0.011***

Source: Elaboration on SHIW (various years), sample restricted to age bracket 25–54, and various sources (see Table 12.1).

evidence in favor of H_5). Hence it may be said that while women's formal employment is increasingly affected by the reduction of gender discrimination and the development of a gender-aware culture, the dynamics of unpaid work in the household and the unequal allocation of family chores are not well served by the model developed here and are worthy of further investigation.

Finally, macro factors are also relevant in determining the impact on women's employment of informal care burdens, as summarized by the dummy variable "cohabiting with an old-aged dependent". As mentioned, the latter variable was positively related to women's probability of being employed in 1977, and negatively since 1986. Thus, the interpretation of the relative interaction terms is more difficult. However, the private provision of services appears to be positively correlated to the variable's coefficient in 1977 and 1995, and negatively in 1986. As a result, we can reject the hypothesis H_6, that regions with more progressive social policies in terms of public services for the conciliation of work and family life unambiguously alleviate the negative effect of housework and family-related responsibilities on women's employment, though this appears to be true half of the time. In conclusion, this aspect – not totally unrelated to the previous ambiguity concerning households' division of labor – deserves further investigation too.

Implications for diversity

As it transpires, the determinants of women's employment prove essentially different from men's and from the aggregate (pooled sample). Hence, designing policies with the aggregate (or the representative agent) as a reference group may lead to serious biases and possibly to inefficacy (as becomes apparent by comparing the estimations on the pooled and women's samples). Even allowing for gender heterogeneity it appears that fundamental issues remain unsolved.

First, unless we were to introduce a substantial number of interaction terms, sign reversals from the pooled to gender-specific estimates would not emerge. Second, the very existence of these sign reversals signals that men's and women's employment cannot be reduced to the outcome of the same autonomous choice process of a representative agent. It is thus confirmed that "women are more than dummies" (Figart, 2005) – that is, their behavior can be modeled neither as simply parametrically different from men's, nor by the use of uncomplicated gender-related dummy variables. To substantiate the concept of diversity, which refers to the social origin of interpersonal differences, in the analysis I endeavored to point out a number of social sources of employment differences.

Under gender-specific estimates, a number of household and contextual variables in particular exhibit opposite effects between men and women in terms of statistical significance and/or signs of the coefficients. In the former case, it is implied that some individual or social factors are relevant for shaping only one gender's employment and not that of the other; in the latter case the same factor (for example, gender roles) even exhibits opposite (specular) effects. In this sense, a representation solely in terms of heterogeneity may prove misleading as the social environment is found to exert a fundamental role in determining the social relevance (in terms of gender) of apparently neutral biological differences (sex).

Second, consideration for context-related dynamics and for their interaction with individual and household characteristics allows for a better fit of the model to the data, and it modifies both the significance and the magnitude of the impact of family and individual variables, suggesting that such effects should not be disregarded even from a purely applied point of view.

Thus, by employing the main results as illustrated above it is possible to compare the relative importance of micro and macro factors in shaping the historical dramatic increase in women's employment. That is, it is possible to compare the relevance of individual factors assumed to be independent of gender diversity (most notably education) as opposed to the (household and regional) factors that were thought to constitute the social origin of gender diversity. In Table 13.7 this is done by reporting the average impacts of selected variables (those most consistently statistically significant). Average impacts are computed for continuous variables as the marginal effect multiplied by the variable's standard deviation, while for dichotomous dummy variables as the average effect of a discrete change from 0 to 1.

Overall, education is confirmed as the most relevant determinant of individual employment: its average impact monotonically increases with educational attainment and it increases over time for all attainments. However, it is evident that family arrangements and institutional dynamics are not utterly irrelevant either.

While being always statistically significant, being married used in 1977 and 1995 to reduce women's probability of employment more than cohabiting with an elderly person, while the most recent estimate points to a reversal of the coefficients' magnitude, with informal care reducing women's employment in 2004 by almost –40 percent and the impact of being married lowering to –6 percent.

Table 13.7 The historical relevance of micro and macro determinants of women's employment: average impacts of variables

	1977	*1986*	*1995*	*2004*
Individual factors: educational attainment (%)				
Primary	53			110
Lower secondary	128	71	60	144
Upper secondary	154	101	111	186
Graduate	206	115	146	231
Individual factors: family and care responsibilities (%)				
Married	–23	–10	–22	–6
Old-aged cohabiting	16	–15	–16	–39
Contextual factors: the three indexes (%)				
CD	9	2	5	24
PPS	–11	–6	–6	–7
LMC	–6	–2	8	9

Source: Elaboration on SHIW (various years), sample restricted to age bracket 25–54, and various sources (see Table 12.1).

Note
For continuous variables, average impacts are computed as the marginal effect times the variable's standard deviation, for dichotomous dummy variables the impacts are the average effects of a discrete change from 0 to 1. Only values are reported for which coefficients are statistically significant at the 10% threshold level.

I estimate the relevance of contextual factors to be less than the impact of individual characteristics, though not negligible. Macroeconomic growth is shown to have exerted ambiguous and relatively small influences on women's employment, accounting on the average for between –5 percent (in 1977) and 8 percent (in 1986) while being almost imperceptible and not statistically significant in the most recent year. The shift away from in-kind social assistance towards private provision of services is estimated to have ceteris paribus reduced women's employment in Italy between –11 percent in 1977 and –7 percent in 2004. Finally, civic development, the compound index of gender-based discrimination and a modified index of human development, is found to be the most relevant contextual factor. Its impact is unambiguously positive and its magnitude, though not as great as the impact of education, is on average as important as family and household variables, ranging between 9 percent in 1977 and 25 percent in 2004.

Such factors explain a large part of the historical increase of women's employment in Italy, but still a substantial region-specific unobserved heterogeneity remains significant in all regressions, implying that the consideration of other determinants, besides the wide array of factors considered here, may be necessary. In particular, other possible interactions between individual and macro characteristics may be in operation. Thus, further analysis is necessary – for example, to study the roles and determinants of the gender division of housework and fertility, and of their impact on women's employment.

Conclusions

Difference or indifference?

This work has attempted to show that political economy still has a certain unexplored potential to explain many forms of differences between persons or groups of persons, despite (or possibly due to) the fact that mainstream practice overlooks such issues. That mainstream economics assumes rather than explains differences has been connected in Part II to two issues in particular: methodological individualism and the *homo economicus* hypothesis.

As shown, as soon as we reject Hobbes' idea of individuals approaching society as self-made (possibly self-sufficient) adults and we recognize the link between society and the individual, we see immediately that any such link is bidirectional. However, in this work the link from the individual to society has tended to be neglected, the social origin of differences being the main object of interest here. Nonetheless, how social institutions emerge out of individual behavior was signaled as a particularly problematic issue, both by comparing Mill's shifting and indefinite (on this issue) theoretical attempts with Schmoller's holistic though somewhat infecund approach, and by considering the crucial impediment that heterogeneity poses to any aggregation based on straightforward summation or averaging of individuals. The solution adopted here was useful in order to focus on specific issues (gender; the labor market) while contextualizing the analysis in a conceptual framework that is only capable of summarizing the whole of society in a pre-analytical vision (though rich and possibly detailed) without producing a coherent general model.[1] Such a method of analysis by "short causal chains" (to paraphrase Marshall) implicitly requires theories and models to be conceptually consistent with the researcher's pre-analytical vision. Admittedly, this process exhibits as its most expedient part, but also as its most delicate part, the large use of *ceteris paribus* clauses (indeed, here was the basis of Sraffa's criticism of Marshall's partial equilibria).

As the analysis of Mill's reflections made clear, the issue of legitimacy and convenience of *ceteris paribus* clauses as applied to the analysis of diversity coincides with the issue of aggregation. The analytical consideration for endogenous differences between people requires them to be distinctively classified, whereas the aggregation of persons or groups within an analytical class implies an assumption that differences among them are non-existent or exogenous at best. Within mainstream contemporary economics, aggregate analysis is almost

exclusively carried out at the national level; that is, aggregating all individuals within the same country-wide class of consumers/workers/savers, and often even aggregating many or infinite subsequent generations (or possibly several analytical classes if firms, the government, and/or foreign countries are distinct). Similarly, microeconomic analysis only considers an indistinct class of exchangers or (depending on the approach) it distinguishes sellers and buyers. In both cases, classes of individuals distinguished by their socioeconomic status are mostly ignored by contemporary economic literature and consideration of diversity is thus structurally impossible.

We consequently arrive at a result contrary to a certain theoretical tradition that identifies political individualism and methodological individualism (from a certain point of view, originated from the remarks by Popper, 1945). Indeed, we have shown that if we want to accentuate a certain individuality, because we reject the hypothesis of homogeneity, we need to either: (1) analytically separate one or more classes of individuals and investigate these aggregates separately (this turns out to be necessarily implied by the approach of diversity); or (2) consider a whole population at one time, but this will allow us to formulate statements that are true only in the aggregate and possibly for none of the individuals (the approach of heterogeneity).[2] As it turns out, a normative consideration for persons' specificity, demanded by political individualism, is thus better sought by rejecting methodological individualism – at least in its extreme versions.

That the methodology of analytical classification and aggregation may be instrumental to both political-organicist and political-individualist normative analyses had already been incidentally signaled by Sen in a cursory passage:[3]

> [A] distinction has to be made between (1) an *intrinsic* interest in the inequality between different groups (viewed as *groups*), and (2) the *derivative* interest in group inequality because of what it says about inequality among individuals placed in different groups.
>
> (Sen, 1995, p. 117n, original italics)

As a matter of fact, an unfortunate consequence of methodological individualism appears to be the analytical downplaying of interpersonal differences in favor of a generic "average" (representative) individual, at best allowing for interpersonal exogenous quantitative differences only in certain variable(s).

However, the recognition that both micro and aggregate analyses may turn out to be useful raises the issue of which theory of behavior should be embraced by political economy, seeing as subjective utility theory (SUT) is indissolubly related to methodological individualism. Mill and Schmoller agreed in not conceding any claim to realism or interest in such an approach. Schmoller's criticisms of the *homo economicus* hypothesis relied mainly on a historical assessment of the most relevant determinants of behavior in modern European societies (among which religion, culture, national identity), highlighting the partial character of the hypothesis of the "acquisitive motive" as the only purpose of behavior. Mill's analysis made it evident that SUT is potentially a

much more flexible instrument than it appeared to many of his contemporaries. Indeed, by conveniently redefining a person's self-interest to include any observed behavior on their part (thus possibly including altruism, superstition, respect for an external authority) it is possible consistently to state that any behavior is driven by such "self-interest". This is a tricky approach, however, not an empty black box useful for all analyses.

On the one hand, the term "self-interest" is in common use with a meaning that is very clear (possibly opposite to the meaning with which it may be employed here) and thus it does not definitively suggest such a *black* box. According to Mill, such ambiguity is likely to induce confusion in the reader and to lead to a temptation for the writer to shift from one meaning of the term (the general all-encompassing one) to another (the restrictive and unrealistic one), possibly drawing unwarranted conclusions from too generic a premise. On the other hand, the box is not even *empty*. Indeed, subsuming every behavior under the strict axioms of SUT implies that even such passionate behaviors as for example pride or hate must be subject to certain behavioral assumptions (required to respect the assumption of instrumental rationality) that may not apply to this larger field.

We are thus left with two interpretations of SUT, which to some extent reflect today's use of this analytical tool: a substantive approach (which I term DUT), implying that individuals follow only their selfish interests (meant in the strict sense of increasing their own happiness and avoiding experiencing pain); and a formalist approach (that I called RUT), each time redefining a person's self-interest based on his or her observed behavior (revealed preferences). As has been shown, by means of additional hypotheses the latter approach may in principle be adopted even to formalize a model of individuals' behavior largely determined by social conditions. This was the case for the multilevel statistical model employed to estimate many social factors affecting the relevance of gender for individuals' employment. These factors constitute a relevant example of how many forms of difference (gender, in this case) are social in origin or are at least heavily affected by social institutions – that is, they are forms of diversity and not (or not only) of heterogeneity.

The analysis showed that these considerations are not theoretical refinements of a substantially sound approach but rather that they carry relevant consequences in terms of empirical methods and most notably policy implications. In the case of women's employment, a significant example would be the detection of little or no impact posed by phenomena that would be considered relevant under the heterogeneity approach, such as GDP growth, tertiarization of the economy, and even childbearing.

These considerations, however, lead to a pertinent theoretical question. Marginalist explanations of gender differentials in the labor market are mostly based on heterogeneity (for example: the ability to be pregnant, as in Cigno, 2008; the menstrual cycle, as in Ichino and Moretti, 2009; and even cognitive abilities, such as those in the articles of the Spring 2010 issue of the *Journal of Economic Perspectives*). Ultimately, as Apps and Rees (2009) authoritatively testify, the main policy implication of mainstream models of household economics is that to

increase women's employment the state should reduce taxation on women's labor income. However, any model based on SUT predicts that to increase the supply of labor it is sufficient to increase the full wage, as highlighted in Chapter 11. Thus we face the idiosyncrasy that mainstream economics is paying increasing attention to household and gender issues despite the fact that, due to the fundamental structure of that approach, such models are not likely to significantly innovate upon extant literature.

On the other hand, non-marginalist approaches to economics – such as the Post-Keynesian, the Sraffian, the Institutionalist, the Radical and Marxian – use aggregative analysis as a relevant (if not principal) method of analysis. Issues that have emerged as crucially affected by gender relations through the analysis of Schmoller's and Mill's thought, such as the division of labor, societal capacity for self-reproduction, social institutions and their impact on individual and collective behavior, are central concerns to these schools of political economy. Yet, as highlighted by Todorova (2009), their interest in gender as a relevant analytical classification is scant or virtually non-existent (an exception being the feminist offshoots of these schools of thought; see, for instance, the review by van Staveren, 2010). What the main reasons for such an apparent paradox may be is an interesting question for further research beyond the scope of the present work.

Appendix

A1 A simple numerical example on heterogeneity and aggregation

In Part I of the book it is frequently claimed that heterogeneity implies that aggregate variables cannot be obtained by summation (or any form of linear combination) of the corresponding microeconomic variables. While we refer to Forni and Lippi (1997) for a formal proof of this statement, a simple numerical example may prove useful to illustrate the basic intuition of this reasoning. Let us assume that in Somewhereland County current consumption (C) only depends on current disposable income (Y). There is no such a thing as a necessary bundle or an exogenous component of consumption for the two inhabitants of Somewhereland, Mr John McConsumer and Mr Bruno "Big" Savingone. Neither have any accumulated wealth and labor is their only source of income.

Mr McConsumer (Mc C) is a rather consumeristic type, and indeed his marginal propensity to consume (*MPC*) out of his income is 0.8; on the other hand, Big Savingone (Big S), son of Italian immigrants, was taught by his mother to save: his marginal propensity to consume is 0.3. Thus, according to my definition, the two individuals are not diverse – they hold the same position in society and in the economy – but they are heterogeneous, exhibiting quantitative differences in a relevant parameter (*MPC*). In the first year, Mc C's income is \$10,000, while Big S's is \$1,000 (things are not easy for migrants). Aggregate income in Somewhereland is thus \$11,000 and aggregate consumption is $10{,}000 \cdot 0.8 + 1{,}000 \cdot 0.3 = \$8{,}300$.

The next year, however, Big S acquires full citizenship, and consequently he is included in the government's massive redistribution policy. Being neighbors, Big S and Mc C shall enjoy the same disposable income but since (as is well known) greater equality brings about more economic growth, at the end of the year they will both have earned \$6,000. Aggregate income this year is \$12,000, up by \$1,000 from last year, while aggregate consumption is $6{,}000 \cdot 0.8 + 6{,}000 \cdot 0.3 = \$6{,}600$. That is, the aggregate income has now increased but consumption has decreased, as summarized in Table A1.

If a well-trained econometrician were to try to estimate the consumption function in Somewhereland using OLS, she would find that in the aggregate the *MPC*

Table A1 Income and consumption in somewhereland

	Income ($)	*Consumption ($)*	*MPC (%)*
Year 1			
Big S	1,000	300	30
Mc C	10,000	8,000	80
Aggregate	11,000	8,300	75
Year 2			
Big S	6,000	1,800	30
Mc C	6,000	4,800	80
Aggregate	12,000	6,600	55

(the slope of the straight line in Figure A1) is –1.7, an astonishing negative figure, despite the fact that the two individuals comprising the aggregate consistently exhibit a positive *MPC*.

Such a simple example – built as it is on an extreme case, with the aim to minimize the role of algebra in the economic reasoning – is already sufficient to show that no bi-univocal monotonic relation between micro and macro variables can be assumed: what in Keynesian economics is usually referred to as fallacy of composition.

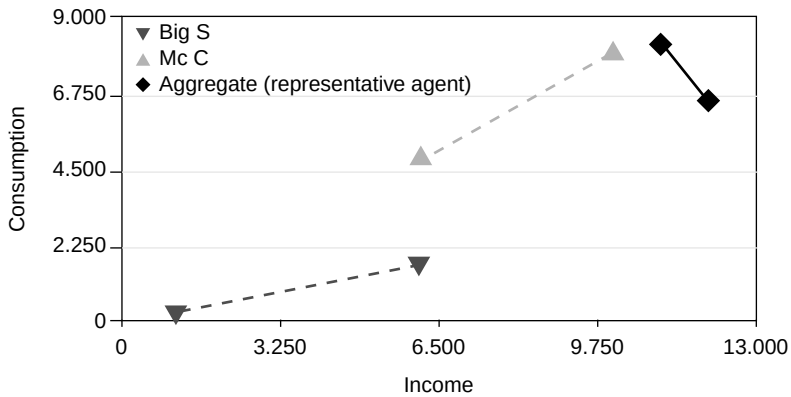


Figure A1 Individual and aggregate consumption in somewhereland.

Additional tables

Table A2 Descriptive statistics for the original macroeconomic variables and the aggregated indexes

	1977		*1986*		*1995*		*2004*	
	Average	*Std. dev.*	*Average*	*Std. dev.*	*Average*	*Std. dev.*	*Average*	*Std. dev.*
Infant mortality	n.a.	*n.a.*	1.13	*0.25*	1.1	*0.26*	1.1	*0.3*
Culture	0.96	*0.35*	0.93	*0.33*	0.91	*0.34*	0.87	*0.29*
Information	n.a.	*n.a.*	0.88	*0.27*	0.94	*0.35*	1.09	*0.19*
In-kind/cash	0.97	*0.39*	0.83	*0.77*	1.03	*0.82*	1.11	*0.26*
Direct	1	*0.06*	1.03	*0.1*	1.41	*0.35*	2.93	*2.4*
Social assistance	1.07	*0.29*	1.48	*2.04*	2.22	*6.42*	2.84	*9.5*
Kindergarten	0.93	*0.47*	0.97	*0.56*	0.95	*0.52*	1.19	*1.15*
GDP pro capita	0.98	*0.25*	0.97	*0.25*	1.25	*1.21*	0.98	*0.23*
GDP growth (t−2)	1	*0.07*	0.99	*0.1*	1.01	*0.18*	1.01	*0.25*
Tertiarization	1	*0.16*	1.01	*0.12*	1.01	*0.1*	1.1	*0.1*
Segregation	1.14	*0.34*	1.16	*0.34*	1.1	*0.31*	1.08	*0.18*
Self-employment	0.99	*0.34*	0.92	*0.25*	0.99	*0.28*	1.05	*0.15*
Modified HDI	0.96	*0.35*	0.94	*0.23*	0.95	*0.3*	0.96	*0.19*
Social expenditure	0.92	*0.22*	0.79	*0.35*	0.77	*0.43*	0.71	*0.53*
Lagged GDP growth	1	*0.07*	1	*0.07*	0.99	*0.07*	1.01	*0.11*
Tertiarization	1	*0.16*	1.01	*0.12*	1.01	*0.1*	1.1	*0.1*
Gender-based discr.	1.03	*0.26*	1.01	*0.23*	1.02	*0.19*	1.07	*0.14*
CD	0.15	*1.09*	0.04	*1.12*	–0.05	*1.13*	–0.15	*0.62*
PPS	–0.99	*0.76*	–0.37	*0.61*	0.18	*0.49*	1.18	*0.56*
LMC	–0.32	*0.56*	–0.07	*0.58*	0.17	*1.12*	0.22	*1.44*

Note
"Average" and "Standard Deviation" between the 20 Italian regions of the macroeconomic variables and the aggregated indexes described in the text. Mean values do not equal 1 because normalization was conducted with respect to the actual national average value, not the mean of the values of each region.

Table A3 Determinants of employment status, regional marginal effects of the probit regression reported in Table 11.1

	Pooled	*Men*	*Women*
Piedmont	0.0879	0.0309	0.1449
	*(0.0255)***	*(0.0174)*	*(0.0468)****
Lombardy	0.0704	0.0402	0.0911
	*(0.0282)***	*(0.0183)**	*(0.0517)**
Trentino-A. Adige	0.1524	0.0680	0.2231
	*(0.0231)****	*(0.0118)****	*(0.0532)****
Veneto	0.1173	0.0506	0.1741
	*(0.0245)****	*(0.0153)***	*(0.0489)****
Friuli V. Giulia	0.1142	0.0345	0.1931
	*(0.0279)****	*(0.0199)*	*(0.0532)****
Liguria	0.0841	0.0009	0.1599
	*(0.0288)****	*(0.0260)*	*(0.0508)****
Emilia Romagna	0.1581	0.0574	0.2482
	*(0.0194)****	*(0.0126)****	*(0.0395)****
Tuscany	0.0891	0.0298	0.1408
	*(0.0259)****	*(0.0192)*	*(0.0482)****
Umbria	0.1165	0.0334	0.2066
	*(0.0273)****	*(0.0214)*	*(0.0526)****
Marche	0.0646	0.0198	0.1084
	*(0.0288)***	*(0.0211)*	*(0.0516)***
Abruzzo	–0.0719	–0.0399	–0.0955
	(0.0538)	*(0.0431)*	*(0.0787)*
Campania	–0.1524	–0.0790	–0.2340
	*(0.0374)****	*(0.0344)****	*(0.0534)****
Puglia	–0.1359	–0.0620	–0.2245
	*(0.0424)****	*(0.0382)***	(0.0627)****
Basilicata	–0.0234	–0.0210	–0.0295
	(0.0503)	*(0.0439)*	*(0.0851)*
Calabria	–0.0976	–0.0768	–0.0769
	*(0.0483)***	*(0.0457)***	*(0.0739)*
Sicily	–0.0981	–0.0492	–0.1561
	*(0.0392)****	*(0.0329)**	*(0.0613)****
Sardinia	–0.0233	–0.0089	–0.0595
	(0.0370)	*(0.0291)*	*(0.0637)*
Observations	8,716	4,240	4,476
Log-likelihood	–4,002.67	–1,295.95	–2,505.6

Notes
Robust standard errors in brackets. Reference region is Latium.
***: significant at 1%, **: significant at 5%, *: significant at 10%.

Notes

Introduction

1 The perusal across several subfields of economics (as well as across some currently separated approaches or "paradigms") is unusual, and it was indeed regretted by one of the referees of the book. While different readers may find themselves at ease with different parts of the work, I think that pluralism (even eclecticism) of methods is a fruitful rhetorical device, and allows for a certain mutual reinforcement of arguments. However, to prevent the explosion of too many topics being handled, it also inevitably requires a certain synthetic style and sometimes a cursory exposition of the related literature: I hope that specialists in each subfield will not find the work too superficial or fuzzy, while I hope that the similarly unusually long list of references may do something to counterweight this tendency.

2 Throughout the book I will make extended use of the terms "mainstream" and "marginalist" economics. By the former I simply mean the greater part of the literature and of the currently active economists, whereas by the latter I mean more specifically the schools and approaches to economics that fit with the brief sketch of a "marketplace" pre-analytical vision described in Chapter 1. However, these are useful but imprecise definitions. There is an increasing interest in the history of economics of the twentieth century but historians have not yet reached a consensus on meaningful ways to classify schools and approaches, and such an endeavor is largely beyond the scope of the present work. Interested readers are referred to Roncaglia (2005) and to the works presented at the annual History of Recent Economics Conferences, some of which are available online at: www.hisreco.org/.

3 By methodological individualism, wherever stricter definitions are not necessary to the analysis, I mean the assumption that social phenomena can only be analyzed by investigating individuals' actions. This methodological stance is usually though not necessarily related to the ontological assumption that collective entities do not exist independently of the individuals that comprise them; in the other social sciences, it is related to the "nature vs. nuture" and the "agency vs. structure" debates.

4 The debate is partly analogous to that between "difference" and "equality" in feminism, the former emphasizing irreducible differences between men and women, the latter highlighting the substantial commonality of the human experiences. Incidentally, modern writers tend to talk about "diversity feminism" – that is an approach aware of the differences between men and women – and they simultaneously advocate an "equality of worth" (Squires, 1999). Beyond the use of the same term, the present work is not concerned with contributing to this specific debate within feminist literature, as its objectives remain in the field of economic theory and methodology. Hence, the use of the term *diversity* should here be interpreted only using the definition developed in Chapter 1.

5 For an investigation of unpaid work in Italy, considered as an internationally relevant case study, see Picchio (2003).

6 By tertiarization, throughout the work I mean the growth of employment in the service sector rather than the growth of value added in the service sector as a share of GDP.

1 The night in which all cows are black?

1 "[…] hindert die Gleichheit der Menschen den Austauch." (Schmoller, 1904, p. 4).

All citations from G. Schmoller's *Grundriß* are translated by me. Since the work was never published in English, though, I also give the original German in the notes. The reference "Schmoller (1900)" refers to the first volume, while "Schmoller (1904)" refers to the second, published four years later. The other citations from Schmoller – namely 1874, 1910, and 1920 – are taken from texts translated into English. In these cases the text reported is the translation published either in print or online, as indicated in the Bibliography.

By contrast, it should be noted that Mill was in the habit of repeatedly revising and modifying his major works, something that he continued to do throughout his life. Thus, in this work I will adopt the convention of denoting Mill's works by their last edition as modified by the author, even if posthumously published (excluding reprints).

Also the texts reported in citations are the last edition of each work as published in the Toronto edition of John Stuart Mill's collected works (partly republished by Liberty Press). When reference to previous editions is necessary, it is clearly stated in the text and comparison with the last edition is reported. This method is preferable to citing the first edition for three reasons. First, all texts that have been modified should be read in their final form, as the author wished, unless there is some specific reason against. Second, even for texts that have not been considerably changed, the last edition should be cited for reasons of consistency. Third, in the case of these texts, reference to the last edition is still the preferable philological solution, since Mill's decision to republish a work is proof in itself that that the text reflected his current thought at that time.

Thus, reference to the last edition allows us to highlight the temporal proximity of such works frequently considered as partly contradictory; as, for example, the essay "On the Definition of Political Economy, and the Method of Investigation Proper to It" (first publication 1836, second publication 1844) and the *Principles of Political Economy with Some of Their Applications to Social Philosophy* (first edition 1848, last edition 1871). On this matter, the position taken in this work, in agreement with Bladen (1965), is that the two works are wholly coherent, and they appeared to the author as such, as evidenced by the narrow timeframe between the last edition of the former publication and the first edition of the latter, coupled with the lack of any qualification or reference to the older in the newer. For a discussion, see Chapter 5.

2 Although these results point out the inadequacy of aggregate models based on the representative agent or on any simplistic hypothesis concerning the microfoundations of aggregate models, the mere presence of heterogeneity does not rule out macroeconomics altogether. For example, in some cases the assumption of heterogeneous agents can be shown to explain otherwise puzzling macroeconomic dynamics (see, for instance, An *et al.*, 2009).

3 As mentioned, unless more complete microfoundations are adopted, in order to study the distribution of the individual parameters alongside their individual values.

4 As is well known, Pareto's law states that the distribution of income (though originally referred to as wealth) follows a power-law distribution; that is, the number of people earning an income equal or greater than x is equal to x raised to the power of a constant (to be empirically estimated) called the Pareto coefficient. Empirically, this distribution is found to provide a good fit only of top incomes, while the distribution of low and middle incomes is better fit by a log-normal distribution.

5 Due to this ambiguity, throughout the work I will use the term "agent" any time it is not clear whether a certain theory relates to individuals as opposed to organizations or collective aggregates.

6 This distinction partly overlaps with the division between the new Keynesian and the post-Keynesian schools.
7 An effective citation from J.S. Mill may give a sense of how the approach proposed here, through the historical analysis of his (and Schmoller's) works, is diametrically opposed to the excesses of scientific specialization: "A man's mind is as fatally narrowed, and his feelings towards the great ends of humanity as miserably stunted, by giving all his thoughts to the classification of a few insects or the resolution of a few equations, as to sharpening the points or putting on the heads of pins" (Mill, 1865, p. 312). Arguments by the two authors in favor of interdisciplinary cross-fertilization are investigated in Chapter 5.
8 Unless stated otherwise, by "institutionalist" and "institutionalism" I mean the "old" institutional school(s); reference to the new institutional economics (NIE) literature, substantially different in method and topics, will always be distinguished clearly in the text.
9 In fact, while certain biological studies pointed out the existence of possible correlations between gender birth ratios and social conditions, several works on the "missing women" issue show that society can have a strong impact on child survival rates (Sen, 1989).
10 To be precise, they qualify analytical egalitarianism as the doctrine that "all the observed differences among people arise from incentives, luck and history" (Levy and Peart, 2003, pp. 261–262), but then they cite Adam Smith, who attributed most differences to the division of labor and its consequences in terms of "habit, custom and education" (Smith, 1776, p. 28). The difference between the two sorts of considerations (ultimately, incentives versus education) is relevant and will be discussed in Chapter 5.
11 As Kregel (1995) shows, the actual observation of the Paris and London stock exchanges determined Walras' and Marshall's views of the market in their economic theories, and the institutional differences between the two financial centres explain to a large extent the two authors' different hypotheses on the process of convergence of the market price to equilibrium.
12 By which we mean the overcrowding of one sex in certain occupations and its underrepresentation in other occupations or industries.
13 The debate is ongoing, the most recent survey of it at the moment of writing is provided by Roncaglia (2010).
14 According to Schumpeter (1954), price theory is the central building block of economic theory, and indeed it provides one of the pieces of analysis more closely affected by and connected to the economist's pre-analytical vision. Thus, if we adopt the overly simplifying hypothesis (which, as mentioned in the text, is rejected by several authors) that the Arrow–Debreu model is a paradigmatic reference for mainstream price theory, while Sraffa's system is consistent with the classics' market-system view, then one of the main issues is what the analysis takes as given, and what it seeks to explain. In the Arrow–Debreu model, agents' preferences and endowments are given and they are the factors that ultimately (avoiding the problem of multiple equilibria) determine the model's competitive solution. In Sraffa's system, individuals' preferences and endowments are not only not given but they do not appear even as constants: it is rather production techniques, activity levels and one of the distributive variables that act as the exogenous variables of the model. Thus, the latter model is characteristic for its open character, more explicitly grounded on a *ceteris paribus* hypothesis and a method of separation of the issues. This openness is probably more easily accorded with a separate but conceptually consistent analysis of many forms of diversity, not constrained to attribute interpersonal differences to differences in the original endowments. Still, so far such an analysis has not been developed to any considerable degree even in the Sraffian tradition.

15 This predisposition of the theory to accommodate some sorts of explanations in place of others may be seen from anecdotical evidence, for example in the work by Francis (2008), who goes so far as to propose a microeconomic model of adult human sexual orientation as a result of rational choice.
16 This is a crucial issue for the market-system view of the economy since, as Roncaglia (2005) notices, one does not see how nature can have "so formed us" to perfectly match the skill requirements necessary for the viability of production, especially in the light of a process of technological change moving faster than the replacement of human generations.

2 Lessons from the past

1 It should be stressed that agreement on policy reforms does not imply absolute scientific unanimity of paradigms and approaches, Mill being a strong supporter of the positive role of the competition of alternative views, with none clearly dominating research or teaching: "that all education should be […] framed on the same model, and directed to the perpetuation of the same type, is a state of things which […] will assuredly be more repugnant to mankind, with every step of their progress" (Mill, 1865, p. 314).
2 As is well known, the *Methodenstreit* (battle of methods) is a short debate between Schmoller and Carl Menger that attracted serious controversy. Menger allegedly sent to Schmoller his *Investigations into the Method of the Social Sciences with Special Reference to Economics* (*Untersuchungen über die Methode der Socialwissenschaften und der politischen Oekonomie insbesondere*, 1883), summarizing the major methodological tenets of the nascent marginalist paradigm, including methodological individualism and deductivism. Schmoller wrote a negative review of the book reportedly without even having read it. Menger reacted in 1884 with a pamphlet and after a few more articles the debate was over, though with the notable consequence that Schmoller would go on to use his academic power to prevent economists who embraced the Austrian marginalist method from teaching in German universities.

This may be the main reason for the caricature of Schmoller as an empiricist almost uninterested in theory and at any rate religiously loyal to a purely inductive method. Indeed, in the context of the *Methodenstreit* Schmoller expressed himself in exaggerated and uncompromising terms that mostly do not match his practice in *Grundriß*. However, the "battle" went on, and all his colleagues and followers were denounced with him, as may be seen from a late comment by a leading figure among the Austrians:

> They blame economics for being "abstract" and advocate a "visualizing" (*anschaulich*) mode of dealing with the problems involved. They emphasize that matters in this field are too complicated to be described in formulas and theorems. They assert that the various nations and races are so different from one another that their actions cannot be comprehended by a uniform theory; there are as many economic theories required as there are nations and races. Others add that even within the same nation or race, economic action is different in various epochs of history. These and similar objections, often incompatible with one another, are advanced in order to discredit economics as such. In fact, economics disappeared entirely from the universities of the German Empire. […] Nobody cares today about all that Gustav von Schmoller, Adolf Wagner, Lujo Brentano, and their numerous adepts wrote in their voluminous books and magazines.
>
> (Mises, 1969, p. 15)

Historians now agree that to a great extent the *Methodenstreit* (starting from the very name used to describe the episode) has been attributed a more warlike tone than it really had, partly because it involved an academic fight quite apart from the theoretical dissent. As shown in Chapters 3 to 5, Schmoller's methodological position is indeed closer to J.S. Mill's and the late classics than is usually admitted.

3 In many cases, rather than attributing to them the explicit hypothesis that their theories were universally applicable, it would probably be more correct to say that British classical economists were only concerned with the study of their own society, though some of them sometimes did make use of inappropriate metaphors or examples (such as those concerning prehistoric societies).

4 Nach ihm [Ricardo] hat sein Schüler und jüngerer Freund, John Stuart Mill, die englische Nationalökonomie bis in die Gegenwart beherrscht; auch er bewegt sich trotz seiner universellen Bildung in den Geleisen des abstrakt radikalen individualistischen Naturrechts des 18. Jahrhunderts; er ist der gläubige Schüler der Benthamschen Nützlichkeitsmoral, die zwar das größtmögliche Glück der größten Zahl von Menschen auf ihre Fahne schreibt und um eine empirisch-psychologische Moralforschung wesentliche Verdienste hat, aber zu einer tieferen Auffassung von Staat, Gesellschaft und Volkswirtschaft nicht kam.

(Schmoller, 1900, p. 92)

5 Der Unterschied der jüngeren historischen Schule von ihm ist der, daß sie weniger rasch generalisieren will, daß sie ein viel stärkeres Bedürfnis empfindet, von der polhistorischen Datensammlung zur Specialuntersuchung der einzelnen Epochen, Völker und Wirtschaftszustände überzugehen.

(Schmoller, 1900, p. 119)

6 Die Ursache alles Verkehrs und alles Handels liegt in der Verschiedenheit der natürlichen Schätze der Erbe, in der Verschiedenheit der Menschen und ihrer Bedürfnisse und in der Arbeitsteilung.

(Schmoller, 1904, p. 4)

3 Social sciences and the act of classification

1 On which see Chapter 2, note 2.
2 Hayek (1944) makes a similar point though without proposing a new term to distinguish this ethico-political stance from the methodological assumption.
3 As mentioned in Chapter 1, contemporary mainstream literature exhibits the emergence of a much stricter approach, that of the "microfoundations of macroeconomics", according to which aggregate relations should in any case be formally derived by the analysis of micro-behavior. Evidently, this position amounts to the refusal of any aggregate analysis autonomous from the analysis of individuals' behavior (Colander, 1996).
4 "To render it [political economy] perfect as an abstract science, the combination of circumstances which it assumes […] should embody all the circumstances that are common to all cases whatever, and likewise all the circumstances that are common to any important class of cases" (Mill, 1844, p. 329, the 1836 edition gives "class" in italics).
5 Ethology is the inductive science of "national character" that Mill hoped would have complemented political economy within the social sciences. However, he never personally embarked on the enterprise of founding such a discipline (see Chapter 5).

6 Nicht einen objektiven, unabhängig von den einzelnen und über ihnen waltenden, sie mastisch beherrschenden Volksgeist giebt es, wie die historische Rechtsschule lehrte; ebenso wenig einen allgemeinen Willen, der in allem übereinstimmte, wie Rousseau träumte. Aber es gibt in jedem Volke eine Reihe zusammengehöriger, einander bedingender und nach einer gewissen Einheit drängender Bewußtseinkreise, die man als Volksgeist bezeichnen kann. [… dieser objektive Geist] nicht außerhalb der Individuen, sondern in ihnen lebt, daß jedes Individuum mit einem größeren oder kleineren Teil seines Selbst Bestandteil mehrerer oder vieler solcher Kreise, solcher Teile des objektiven Geistes ist.

(Ibid., p. 16)

7 "[…] wir geben heute zu, daß, um das Seelenleben der Volker zu verstehen, wir immer wieder von der Untersuchung des gewöhnlichen, individuellen Seelenlebens ausgehen müssen" (ibid., p. 15).

8 […] aus den oben geschilderten psychischen Massenzusammenhängen, aus Sitte, Recht und Moral, aus den täglich sich ergebenden Berührungen, Anziehungen und Abstoßungen, aus den Verträgen und vorübergehenden Ineinanderpassungen ergeben sich dauernde Formen des gesellschaftlichen Lebens.

(Ibid., p. 61)

9 "Wir verstehen unter einer politischen, rechtlichen, wirtschaftlichen, *Institution* eine partielle, bestimmten Zwecken dienende, zu einer selbständigen Entwickelung gelangte Ordnung des Gemeinschaftslebens" (ibid., p. 61, original italics).

10 "Wir verstehen unter einer *Organbildung* die persönliche Seite der Institution; die Ehe ist die Institution, die Familie ist das Organ" (ibid., p. 61, original italics).

4 Individual and aggregate behavior

1 "Men often, from infirmity of character, make their election for the nearer good, though they know it to be less valuable" (Mill, 1861b, p. 212).

2 In his *Theory of Moral Sentiments* Smith conceives of human beings as capable of *sympathy*, that is of understanding the feelings of other persons and figuring the respective enjoyment or pain by means of comparison with their own feelings (Smith, 1759). Sympathy, in Smith's analysis, induces a moral behavior that implies the respect for certain rules of conduct as an "impartial spectator" would find acceptable; that is, a self-interested behavior within the limits of not trespassing upon the boundaries of what is a fair and civil conduct (Roncaglia, 2005).

3 It is in part owing to the contrast of equally meritorious ends, which frequently cannot be solved even by long and rational reflection, that Mill embraces a moral canon (rule utilitarianism) which applies the utilitarian criterion to rules of conduct thought to be generally valid, rather than to specific acts or situations.

4 Priestley (1969) notices that both *Bentham* and *Coleridge* are rhetorically based on an effective inverse climax, from "half-truths" in the first passages, to "partial-truths" and finally "partial views".

5 In *Principles*, Mill uses the term "routine" eleven times and "habit" forty-four times. It appears that Mill only uses "routine" in respect to the sphere of employment and production, while "habit" frequently refers to consumers as well as to non-economic behavior (possibly apart from a single case in Book V, Chapter 5, § 1).

6 It is possibly due to Mill's personal experience at a young age of the "boundless power" of education that he made such comments, which are consistently present in his works.

7 Trotz aller dieser Abweichungen hat die gleiche Menschennatur, die gleiche gesellschaftliche Entwickelung und die gleiche Ausbildung der Ideenwelt bei allen höher stehenden Volkern eine merkwürdige Übereinstimmung der georderten Pflichten, Lugenden und Güter erzeugt. Eine Erfahrung von Jahrtausenden hat immer mehr dieselben Handlungen, dieselben Gefühle als die notwendigen Bedingungen des Glückes der einzelnen, wie der Wohlfahrt der Gesellschaft aufgedeckt. Bei alle Völkern arbeiten sich nach langen Irrwegen dieselben Ideale durch, die in relativ wenigen und einfachen Sätzen und Ideen sich zusammenfassen lassen. […] Behaupte und vervollkommene dich selbst; liebe deinen Nächsten als dich selbst; gebe jedem das Seine; fühle dich als Glied des Ganzen, dem du angehört; sei demütig vor Gott, selbstbewußt aber bescheiden vor den Menschen. Derartiges wird heute in allen Weltteilen ud von allen Religionen gelehrt.

(Schmoller, 1900, p. 45)

8 The first volume of *Grundriß* was published in 1900, roughly three decades after the last edition of Mill's *Principles* and more than two decades after the first publication of Jevons', Walras' and Menger's major works.

9 "Die Grundlage alles individuellen Bewußtseins […] sind die Lust- und die Schmerzgefühle" (ibid., p. 20).

10 "Das Triebleben ist […] ein Ergebnis der historischen Enwickelung unserer Nerven und unserer ganzen Geistig-sittlichen Natur" (ibid., p. 27).

11 "Die Vorstellung, daß es möglich sei, eine bestimmte Anzahl sich immer gleich bleibender Triebe bei allen Menschen aller Zeiten nachzuweisen, müssen wir dabei freilich fallen lassen" (ibid., p. 27).

12 "ein berechtiger Protest gegen die überspannte idealistische Geschichtsreibung" (ibid., p. 147).

13 Der Erwerbstrieb "ist […] kein ursprünglicher und fundamentaler Trieb, wie etwa der Selbsterhaltungstrieb; […] Er ist ein spätes Ergebnis der höheren Entiwckelung des Selbsterhaltungs- und Thätigkeitstriebes, sowie des individuellen Egoismus, die aus gewisser wirtschaftlicher Kulturstufe ihn erzeugen; […] Es hat Jahrtausende wirtschaftlichen Handelns gegeben ohne ihn.

(Ibid., p. 36)

14 "[…] fast alle Menschen befriedigen einen erheblichen Teil ihrer Bedürfnisse und erfüllen ihre meisten Pflichten nicht als Individuen, sondern als Glieder bestimmter socialer Organe" (ibid., p. 62).

15 "[…] das einzelne Individuum ein Lämpchen oder eine Lampe sei, auf das Familie und Umgebung, Nation und Kirche, Kultur und Wissenschaft das Öl gieße" (ibid., p. 15).

16 […] sie sind bei jedem Individuum das Resultat seiner Rasse, seiner Erziehung, seiner Lebensschicksale. Sie zeigen bei höherer Kultur nach Individuum, Klasse und Einkommen an jedem Orte und in jedem Volke erhebliche Abweichungen; auch beruht der Ausbreitungsprozeß der höherer Bedürfnisse natürliche darauf, daß die an einem Punkte von einzelnen gemachten Fortschritte langsam von Person zu Person, von Klasse zu Klasse, von Land zu Land übergehen.

(Ibid., p. 24)

17 "[…] nirgends so sehr wie bei den Bedürfnissen der Mensch sich als Herdentier zeigt und vom Nachahmungstrieb beherrscht wird" (ibid., p. 24).

18 "[…] jeder Mensch sei beherrscht und bedingt von seinem Milieu, d.h. von den ihn umgebenden Menschen und Bedingungen der Existenz, unter welchen die geisten Elemente die wichtigsten sind" (ibid., p. 15).

19 Während wir heute davon ausgehen, daß die Völker physiologische und psychologische, durch Bluts- und Geisteszusammenhang verbundene Einheit sind, die einen bestimmten Charakter durch viele Generationen und Jahrhunderte behaupten, […] ging die Wissenschaft von Staat, Gesellschaft und Volkswirtschaft im 18. Jahrhundert von den Glauben an die natürliche Gleichheit der Menschen aus. Sie suchte das Wesen der allgemeinen, abstrakten Menschennatur demgemäß festzustellen und aus ihr heraus de gesellschaftlichen Einrichtungen zu erklären. Auch heute noch ruht ein großer Teil der abstrakten Betrachtungen der Volkswirtschaftslehre auf der wenigstens innerhalb gewisser Grenzen wahren und wohl verwendbaren Annahme eines so ziemlich übereinstimmenden Charakters der abendländischen Ruiturvölker.

(Schmoller, 1900, pp. 140–141)

20 [Die theorie von der Wirkung des "Milieu" wird überspannt: sociale und Erziehungseinrichtungen sollen aus jedem Menschen alles machen können. Es ist die der Überschätzung der Natureinflusses entgegengesetzte Übertribung.

So viel ist richtig, daß der einzelne, die Klasse, das Bolz zwar einerseits unter der Herrschaft ererbter Eigenschaften, Instinkte, unbewußter Gefühle und Willensregungen, andererseits aber unter dem Einfluß des großen geistigen Fluidums stehen, das sie umgiebt, das durch Nachahmung, Erziehung und gesellschaftliche Berührung wirst. Die Abgrenzung dieser zwei Ursachenreihen ist um so schwieriger, als jede dauernde Wirkung der letzteren Art zu Sitte und Gewohnheit wird, sich nach und nach auch physiologisch im körperlichen Organismus ausprägt und so beginnt, in das Bereich der vererblichen Faktoren überzugehen.]

(Ibid., p. 146)

21 Den psychologischen Völkerbildern, die wir gaben, kann man vorwerfen, es sei nicht deutlich zu sehen, was in ihnen Folge des erblichen Rassentypus, was Folge des Landes, der augenblicklichen geistigen Bustände und gesellschaftlichen Einrichtungen sei; […] Aber doch ist schon dieses Wissen nicht ohne Wert und wissenschaftlichen Bedeutung.

Jede gute volkswirtschaftliche Schilderung von Ländern Industrien, Agrarzuständen geht heute von einem konkreten psychologisch-ethnographischen, einheitlichen Bilde der handelnden Menschen aus. Alles volkswirtschaftliche Urteilen ist ein sichereres, wenn es nicht bloß den abstrakten Menschen oder gar seinen Erwerbstrieb, sondern die Spielarten der Rassentypen in Auge hat. […]

(Ibid., p. 159)

5 Consequences for economic theory and method

1 The use of "he" and "his" in this citation does contradict the above observation on Mill's use of a gender-neutral language. First, throughout his vast literary production he was evidently not systematically consistent in it; second, in this specific case consideration for women's desire for wealth may be deemed marginal because of women's lives being limited to the private sphere and their rights (property rights in particular) being circumscribed (compare Chapter 8).

2 The laws of value suggested for the first and third classes of commodities are indeed but specific variants of the theory of value applied by Mill to the second class, that of generic commodities: 1) in the first case, the special conditions of supply mean that the cost of production simply constitutes a lower limit to the value of commodities; 2) in the third case, the nature of the productive process makes it necessary to consider land revenue (or additional revenues of the same kind) and the law of decreasing revenue creates a link between the cost of production and quantity produced. In neither case, however, Mill's mechanism to determine the exchange value is substantially modified.

3 Man hat es mehrfach ausgesprochen: die Verkäufer konkurrierten eigentlich allein, die Käufer – man meinte damit die Konsumenten – wenig oder garnicht, nicht unter sich, weil sich umeinander kaum kümmern, und nicht im Sinne eines Widerstandes gegen die Verkäufer. Daran ist viel Richtiges, sofern der verkaufende Kaufmann und Fabrikant meist ein größeres Interesse am einzelnen Geschäft hat als der einkaufende, besonders der wohlhabende Konsument.

(Schmoller, 1904, p. 47)

4 Überhaupt ist mit dem abstrakten Unterschied von Käufer und Verkäufer nicht das Wesentliche bezeichnet. Man kann nur sagen: häufig werden die Verkäufer mehr konkurrieren als die Käufer. Oft aber find auch letztere in einer Lage, daß sie – sei es aus Not, sei es aus entwickeltem Erwerbstrieb – stärker konkurrieren.

(Ibid., p. 48)

5 […] kleinere und größere Kreise bilden, welche durch ähnliche oder gleiche Gefühle, Interessen, Vorstellungen und Willensantriebe vereinigt sind […] Die

> Kreise liegen teils in konzentrischen Ringen übereinander, teils in excentrischen, sich schneidenden und berührenden nebeneinander. Sie sind in steter Bewegung und Umbildung begrissen, stellen Kollektivkräfte dar, welche das soziale, wirtschaftliche, politische, litterarische, religiöse, Leben beherrschen
>
> (Schmoller, 1900, p. 16)

6 > die einzelnen wichtigen Ursachen der Entstehung der socialen Gruppen […] können nur psychologische sein; […] Die gleichen oder nahestehenden Interessen, Gefühle, Vorstellungen und Ideen erzeugen eine Gruppenbildung
>
> (Ibid., p. 65)

7 I should note that the domain of political economy, as practically delimited by the contents of *Principles*, is *de facto* differently demarcated. As Mill explains in the Preface to the book, two criteria directed his choice of topics: (1) the need to follow the path traced by the works of Adam Smith and David Ricardo, and (2) the focus on analyzing power relations within a given state of society. To these we might add the didactic aim of the writer.

8 "[…] wir wollten in unserem *Grundriß* uns nicht so hoher Dinge unterfangen" (Schmoller, 1904, p. 665).

9 From this point of view, while confined to a smaller set of phenomena, Schmoller's stages are closer to Spiethoff's "open" definition of economic styles than to Sombart's styles, strictly characterized in any period by three fixed elements: a specific Spirit, a specific economic order, a specific technology. As opposed to this last method, it is clear that to Schmoller, as was the case with aggregation, periodization should not proceed on purely a priori grounds. Schmoller's stages are actual historical phases of Western countries' development, and not particular forms of a supposed ideal-type stage of development.

6 Gender diversity as inequality

1 Compare, for example, the debates on the relationship between gender and class (McCrate, 1999, for a review) or gender and race (Matthaei, 1999).

2 It should be noted, however, that according to Schumpeter (1954) or Roncaglia (2005) Smith followed a scheme that was already becoming traditional for the nascent discipline, and he may hardly be identified as the sole originator of the resulting selection of topics.

3 As is well known, Smith also maintains this claim in *Wealth of Nations*, stating, for example, that "civil government, so far as it is instituted for the security of property, is in reality instituted for the defence of the rich against the poor" (Smith, 1776, p. 775).

7 Schmoller on the origin of gender inequality

1 This chapter is largely based on the chapter of *Grundriß* entitled "Die Gesellschaftliche Verfassung der Volkswirtschafts" ("The social constitution of the national economy"). Hence, where not otherwise stated, citations are taken from Schmoller (1900).

2 Throughout this work, the term patriarchy will be used in accordance with Schmoller's and Mill's use of the term – that is, a society (or social organ) where men take primary responsibility for the welfare of the whole community and enjoy greater economic, social and political power than women. In feminist literature the term acquired negative emotional connotations, and was even treated by some writers as the opposite of feminism. As it turns out, Mill judged the state of affairs described above to be negative, but Schmoller did not; hence the term should be interpreted here as neutral.

3 Die patriarchalische Familie ist ein Institut der Sitte und des Rechtes zur legitimen Kindererzeugung und zur gemeinsamen Wirtschaftsführung. Gemeinsames Arbeiten und Produzieren unter der Herrschaft des Vaters für die Familie, gemeinsames Essen und Trinken, gemeinsame Geselligkeit, das bindet die Weiber, die Kinder, die Knechte, und Mägde mit dem Patriarchen zusammen.

(Schmoller, 1900, p. 244)

4 "Sie schafft die natürlichste, systematisch und einheitlich geleitete Arbeitsteilung" (ibid., p. 373).

5 Ist so die fortschreitende wirtschaftliche Entwickelung und Differenzierung der Menschen, das Bedürfnis festerer Organisation in kleinsten Kreise das Triebende in der Entstehung der patriarchalischen Familie, so waren doch die religiösen und sittlichen Vorstellungen nicht minder beteiligt, die neue Verhältnisse in Sitte und Recht zu fixieren, ihnen den geistigen Stempel aufzudrücken. Aller Fortschritt der Erziehung beruhte auf einer starken Vatergewalt. Die Ahnenverehrung, das Gefühl des Zusammenhanges mit den Ahnen, der Verantwortlichkeit von ihnen konnte, wie alle höheren Religionssysteme, nur bei Völkern mit Vaterrecht entstehen. Der Gottesbegriff entlehnt noch heute seine Vorstellungen vom Verhältnis des strengen, gerechten Vaters zu seinen Kindern. Nicht unwichtig ist auszumerzen, daß, wo heute Islam und Christentum einbringen, sie das Mutterrecht auflösen, das Vaterrecht sich ausbildet.

(Ibid., p. 244)

6 Die Arbeitsteilung von Mann und Frau schließt sich die der Söhne und Töchter, der Knechte und Mägde, und es entstehen so im patriarchalischen Hause feste Typen von hauswirtschaftlichen Ämtern, von arbeitsteiligen Handwerksarten als Reime späterer selbständiger Organisationen.

(Ibid., p. 247)

7 "zwei ganz gesonderte und doch innig miteinander verbundene, auseinander angewiesene Systeme der socialen und wirtschaftlichen Organisation sind" (ibid., p. 375).

8 "Die Arbeitsteilung zwischen Mann und Frau aber vollzieht sich in der Hauptsache nicht innerhalb der Familie, sondern eben zwischen der Familienwirtschaft und den weiteren socialen Organisationen" (ibid., p. 253).

9 An das Haus und seine Einrichtungen schließt sich die nunmehr vom Manne systematisch geleitete Arbeitsteilung der Familie an. Die Verschiedenheit von Geschlecht und Kraft hatte von jeher den Mann auf die Jagd, den Kampf, die Tierzucht, die Frau auf das Sammeln von Beeren, auf den Hach- und Ackerbau, das Vorrätesammeln die Unterhaltung des Feuers gewiesen; die Herrschaft des Mannes bürdete ihr nach dem Siege des Vaterrechtes wohl oft zunächst noch mehr auf, machte sie zur Sklavin.

(Ibid., p. 247).

10 Die leidliche Behandlung aller Glieder hat in der patriarchalischen Familien so lange gedauert, als die Eigenversorgung ihr Lebensprinzip blieb. Erst als sie anfing für den Markt zu arbeiten, dadurch große gewinne erzielte, als hiermit die Gewinn- und Habsucht neben dem Sinn für technischen Fortschritt entstand, wuchs die Mißhandlung der unteren Glieder der Familie, des Gesindes, der Sklaven.

(Ibid., p. 246)

11 Es lag in der Natur der engen, stets wieder edle, sympathische Gefühle, erzeugenden Hausgemeinschaft zwischen Mann und Frau, Eltern und Kindern, daß die Stellung von Frau und Kindern trog aller brutalen Gewalt des Mannes doch nach und nach eine bessere, auch rechtlich geschürte wurde.

(Ibid., p. 245)

12 "bei den edleren Klassen verschafften der Gattin ihre hauswirtschaftlichen Künste doch wohl bald eine bessere Stellung in dem gemeinsamen Haushalt" (ibid., p. 247).
13 See Nyland and Heenan (2003).
14 "Nun soll, was bisher diese Millionen Menschen in der Familie für sich und die Ihrigen getan haben, in Lohnarbeit für Fremde verwandelt werden! Die Pflege des krankes Kindes durch die Mutter kann kein Krankenhaus der Welt ersetzen." (Schmoller, 1900, p. 256).

15 Daher ist es doch richtig, alle oder die meisten Frauen zugleich so zu erziehen und zu Schulen, daß sie gute Mütter und Hausfrauen ausgestatteten, haben ihren eigentlich Beruf, den in dem sie das Höchste, das Vollendetste, das Segensreichste leisten, verfehlt, wenn sie nicht Mutter und Hausfrau werden; und jede Frau, die eine schlechte Mutter und Hausfrau wird, schädigt sittlich und wirtschaftlich die Nation ebenso sehr oder mehr, als sie ihr nützt, wenn sie die trefflichste Ärtzin, Buchführerin, Geschäftsfrau oder sonst was wird.
(Ibid., p. 257).

16 Das schiefe Ideal der Gleichheit von Mann und Frau vergißt, das alle hörere Kultur größere Differenzierung und größere Abhängigkeit der differenzierten Teile von einander, besser Verbindung der verschiedenen unter einander bedeutet, vergißt den Nachweis, wie es zu machen, daß das Kindergebären und das Massentragen auch abwechselnd von Mann und Frau zu übernehmen sei.
(Ibid., p. 256)

8 Mill and the liberal stance

1 For example, the violation of a moral norm might in specific cases be justified, but the acceptance of violations may undermine the cultural forcefulness of the norm, thus potentially leading to undesired consequences in the long run (see Chapter 4).
2 Consider, for instance, Mill's frequently repeated metaphor of women's subjection as a form of modern slavery: "this dependence, as it exists at present, is not an original institution, taking a fresh start from considerations of justice and social expediency – it is the primitive state of slavery lasting on" (Mill, 1869, p. 130); "there remain no legal slaves, except the mistress of every house." (ibid., p. 217).
3 Mrs Grundy is a character from Morton's play *Speed the Plough* (1798). During the nineteenth century she was well known in the English-speaking world as a personification of the tyranny of conventional propriety.
4 Note that this argument implies that women's current unpaid labor is labeled as unproductive (Pujol, 1992). Mill had devoted a whole essay to the issue in *Some Unsettled Questions of Political Economy*. He may be said to consider the classification of labor as mainly a problem of terminology, which is coherent with Mill's general position on the theoretical and instrumental nature of classes and collective categories; the definition of what is "productive" depends on the necessities of the subsequent analysis, as explained in Chapter 3. The classification as unproductive does not imply that Mill believed the reproduction of physical and human capital to be possible without someone carrying on with housework and caring activities. However, it might imply that the (then and still) current organization of labor, split between the household and the market, is inefficient.
5 Indeed, Mill contends that in observing nature we should not even aim at equaling it, because of its continuous display of crude brutality (for example in the form of natural disasters, but also more simply for the pitiless fate of games and predators alike). According to Mill, the precept to follow the example afforded by nature is "[i]rrational, because all human action whatever, consists in altering, and all useful action in improving, the spontaneous course of nature" (Mill, 1869, p. 402). Gammon (2010) even ascribes to this perception of nature as evil the root of Mill's concept of social

institutions as perfectible, man-made entities and his mild openness towards state intervention, presaging "an increasingly pervasive role for the state" (Mill, 1869, p. 235).

6 It remains an open issue for the contemporary scientist (evidently not considered by Mill) the extent to which gender non-conformity and transgenderism may provide any insight on the matter.

7 Phrenology is a pseudoscience founded in the early nineteenth century by F.J. Gall, upon the following principles: that moral and intellectual faculties are innate; that the brain is the organ of all the propensities, sentiments and faculties; that the brain is composed of as many particular organs as there are propensities, sentiments and faculties, which differ essentially from each other; that the form of the head or cranium represents the form of the brain, and thus reflects the relative development of the brain organs. The discipline is considered to be one of the earliest roots of the contemporary neurosciences (Simpson, 2005).

9 The state, the market, and gender

1 The classification proposed here does not consider variations in writers' own definitions of "market economy" and "capitalism". Indeed, in many cases this might explain the consequent variance in the assessment of the relation between the market and patriarchy. The table should be read as referring, for each writer, to his or her own definition of the market, either explicit or implicit, upon which the subsequent assessment is based.

2 This latter category includes the very diverse modern and contemporary literature usually classified as "Radical Feminism". For a critique of this categorization, and a review of the relevant literature, see Graham (1994), Phillips (2001), and Ring (1985).

3 > Die ganze Anordnung der Wohnungen, der Arbeitsstätten, der Schulen, zw., die ganze Zeiteinteilung, die gesamten Geschäfts- und sonstigen Ordnungen, die sich die einzelnen Organisationen geben, müssen eigentlich ineinander gepaßt sein, ein harmonisches Ganze ausmachen, wenn die Gesellschaft gedeihen, die Unternehmungen und die Familien nicht geschädigt werden sollen.
>
> (Schmoller, 1900, p. 251)

4 As Rossi (1970) notices, Mill avoids here the subject of divorce, for reasons of political prudence, and because it is really a different topic, given the fact that such a law has more to do with family relations (concerning women and men equally) than with gender relations (specifically denouncing women's subjection, given the historical conditions). Indeed, Mill incidentally mentions his views on the necessity of a law on divorce in a number of passages, for instance: "there are, no doubt, women, as there are men, whom equality of consideration will not satisfy; with whom there is no peace while any will or wish is regarded but their own. Such persons are a proper subject for the law of divorce" (Mill, 1869, p. 172).

5 Similarly, Mill does not take a position on the process of commodification of housework and caring activities, although his reference to both workers' and consumers' cooperatives and the many examples of social experiments by the cooperative movements, where most private unpaid labor was socialized, might hint at a positive judgment, on Mill's side, on a possible development of the division of labor towards the transfer of an ever greater number of economic activities outside of the family. For the contrary hypothesis see Ball (2001).

10 Gender, diversity and heterogeneity in the labor market

1 Thus, I take a binary approach to employment: individuals are considered to be employed or not employed. However, I recognize the importance of engagement in part-time work or the distinction between unemployed and inactive portions of the

population. I focus specifically on women's employment rather than women's participation for several reasons. On the one hand, I maintain that among the key labor market indicators the employment rate constitutes the best index of labor market dynamics (in particular, the unemployment and activity rates are, in my view, too dependent upon the conventional statistical definitions of what actions are considered as "actively looking for a job"). On the other hand, in terms of the reciprocal influence of the key labor market indicators, the employment rate can play a significant role. Finally, Italy lags well behind the Lisbon target in terms of women's employment rate and this index constitutes therefore a major priority for economic policy in the country.

2 Henceforth, gender diversity will be interpreted mostly, from the applied point of view, as substantiated by different socioeconomic processes. As was discussed in previous chapters, this does not necessarily imply that innate differences between men and women do not exist. Rather, in the light of the fundamental uncertainty on this point, attention is focused on highlighting the social relevance of these differences.

11 How gender may help in understanding the labor market

1 Throughout the work I include the regions Val d'Aosta, Piedmont, Liguria, Südtirol, Lombardy, Veneto, and Friuli-Venezia Giulia in the North Italy area; Tuscany, Emilia Romagna, Marche, Umbria, and Latium in the Center; Abruzzo, Molise, Campania, Puglia, Basilicata, Calabria, Sicily and Sardinia in the South.

2 The choice of nine-year intertemporal windows was informed by issues of data availability and the widespread evidence that changes in labor market inclusion take time to occur, as they depend mostly on variables that respond slowly to the business cycle and policy innovations (for example, concerning education, taxation, culture, allocation of time and household resources).

3 Overall it seems that the urban as to opposed to rural residence dimension does not play a relevant effect on in the probability of being employed, and it will not be explicitly considered when commenting on the results of most of the estimations that follow, although it will always be kept as a control variable in the regressions.

12 How economics may help in understanding gender

1 Recent works provide evidence of the existence of such an interaction between the micro and macro levels. For example, Lefebvre *et al.* (2009) find that the provision of childcare facilities and subsidies for daycare spaces have a positive impact on women's labor supply, and that this impact is more relevant for less educated women. Similarly Gutiérrez-Domènech (2005), studying women's transitions from employment to non-employment after their first baby, finds that in a number of European countries the impact of education on women's labor supply is likely to depend on the institutional characteristics of the labor market.

2 This collection, as well as the rest of the work described Chapters 12 and 13, has benefited from a fruitful collaboration with Angela Cipollone.

3 Moreover, in the second (aggregate) level, there are only 20 observations corresponding to the 20 regions of Italy, and consequently a large number of independent variables could not have been identified.

4 The variable "information" synthesizing average household expenditure for periodicals and newspapers was not available for the year 1977.

5 Bettio (2002) argues that there are advantages and disadvantages to horizontal occupational segregation by gender, and that from some points of view (for example, the gender pay gap) it should not be considered as a completely negative phenomenon. However, it is considered as such within the present analysis, because – while I here ignore incomes – I am concerned mainly with its economic dimension as a barrier to fair competition in the labor market, and with its cultural dimension as a factor confirming gender stereotypes.

6 By prominent self-employment I mean those occupations (namely general practitioners and specialized medical occupations, notaries, business consultants, barristers and other law consultants) with high income and high social status, as a consequence not only of the skills involved but also of the public certifications that are necessary to enter the profession. As the issue of these certifications is managed by the very same professional associations, they are able to erect considerable barriers to entry and are more likely to discriminate against women, as noted by Cipollone and D'Ippoliti (2010).
7 Thus, rotation of factors was adopted by means of the varimax method, which attempts to minimize the number of variables that have a high correlation coefficient on a factor. Three factors were selected, which satisfy the following requirements: exhibiting eigenvalues close to or larger than unity; individual contribution to the explanation of the overall variance of the data greater than 10 percent; cumulative contribution to the explanation of the total variance of the data greater than 60 percent. Within each of these factors, the single indicators are weighted according to the proportion of their cross-region variance explained by the factor. As a result, regions can be scored on each of the factors using the estimated weights.
8 Rabe-Hesketh *et al.* (2004a; 2005); Rabe-Hesketh *et al.* (2001); Rodriguez and Goldman (1995; 2001).
9 Note that the coefficient does not reflect the marginal utility of being married, and (all other variables being equal) the estimate of the utility function will be the same for non-working married and non-working single women. As explained in the text, for reasons of simplicity I treat fertility as exogenous.

13 Analysis of men's and women's employment

1 One of the consequences of the hypothesis of exogeneity of the macro factors is that we do not say anything concerning the role of conciliation policies in culturally reinforcing traditional gender roles (a possible drawback of such policies, highlighted in Chapter 9). However, from the principal-component analysis developed in Chapter 12 it emerges that the variables related to social policy and those summarizing the cultural milieu are not straightforwardly correlated at the regional level.
2 I conducted a test of exogeneity of the variable "cohabiting with an old-aged person" with respect to employment choices using the procedure outlined by Smith and Blundell (1986) on a simple probit model of employment, for the years 1995 and 2004. I adopted the educational attainment of the parents of both the household's head and the partner and the extent of public social assistance as instruments (these variables are not available for years 1977 and 1986). The calculated p-values exceed 0.05, so the observations are consistent with the null hypothesis of absence of endogeneity. In other words, findings indicate that one cannot reject the statistical exogeneity of "cohabiting with an old-aged dependent" in the probit model of employment.
3 For the year 1977, the variable "education" was missing for a number of working-age women and men. To address this issue, I imputed the corresponding value by means of iterative techniques, using the module for Stata called ICE (Imputation by Chained Equations) described by Royston (2004, 2005).

Conclusions: difference or indifference?

1 Indeed, the analysis of Mill's and Schmoller's thought shows that even the economic pre-analytic vision ceases to be exhaustive, and while a division of labor is inevitable in order to make possible the study of all aspects of society, there is not necessarily a sharp distinction between the social sciences. On the contrary, results from the different subdisciplines should be comparable and mutually consistent, if the integration of many partial views is desired. Moreover, the unity of man and of society implies that cross-discipline studies are necessary for the application of science to specific issues,

while the prevailing division of scientific labor by subject is possibly to be considered more an inheritance of tradition than the product of rational design.

2 Nothing prevents the consideration of heterogeneity within a class or aggregate; a mix of the two methods is always possible.

3 Although he expresses the point as an empirical regularity rather than a logic necessity, Sen recognizes that in the study of inequality aggregative analysis is "in many cases" unavoidable and "general analyses […] would tend to confine attention to *intergroup variations*" (ibid., p. 117, italics in original) due to the practical impossibility of considering the specificity of each individual separately.

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