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TITLE:

Intergenerational social mobility in Italy

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ACCADEMIC YEAR 2014/2015

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Introduction

The aim of the following dissertation is to analyse intergenerational social mobility in Italy. A society characterized by perfect intergenerational social mobility is a society in which the chances of reaching a socioeconomic position are the same for each individual, regardless of their family background. Meaning that individual attainments are based on abilities and efforts. Conversely, in a society where there is low social mobility there is a strong association to socioeconomic positions among parents and children. As a result, the specific focus is to assess the degree of mobility in the Italian society compared to other countries and pay particular attention to its specificities. The main purpose is to identify the factors hampering or promoting this phenomenon. When a society displays immobility it is important to analyse the reasons, as such rigidity may be due to disparities in the opportunity, obstructing a fair competition among individuals. Inequalities of outcomes are judged unacceptable if circumstances beyond individuals' control become more relevant than individuals' efforts and abilities. Additionally, the aim of the thesis is to comprehend whether such unacceptable inequalities are worrisome only for their ethical reasons or also for efficiency reasons. Moreover, it is subject to analysis whether wide inequality of income in a society might influence social mobility. Furthermore, the Italian case is studied.

In order to reach these objectives, a research on the issue was undertaken and the relevant theoretical literature was explored and systematized. Theoretical literature is often combined and supported by empirical evidence on the topic.

The dissertation is divided into four chapters to disentangle these diverse elements. The first chapter introduces and defines social mobility. It explains the difference between intra and intergenerational mobility, as well as the distinction between absolute and relative mobility. Only the latter concept is useful to understand the degree of openness of a society, since it reveals the presence of disparities in the chances of arriving at a certain socioeconomic destination among people from different socioeconomic origins. Then the main indicators that can be used to measure social mobility are described along with their problematic aspects. The chapter gathers the most significant theoretical and empirical researches on cross-country trends in intergenerational social mobility with specific attention to intergenerational occupational mobility. In this way it is possible to attain an overall picture of both absolute and relative intergenerational

social mobility rates in a number of countries and to identify in which position Italy is ranked. The chapter concludes with a specific focus on the Italian intergenerational social mobility pattern.

Once the degree of transmission of the socioeconomic position from parents to children in the Italian society is assessed, it is then important to focus on the specific factors promoting or hampering social mobility. This is the goal of the second chapter in which social mobility is treated as a function resulting from the combination of different factors such as non-economic, institutional, economic, and the interaction of economic and social factors. An analytical study of the different factors is conducted, and empirical evidences of the Italian case are reported. Among the non-economic factors related with the transmission of occupation across generations, there are the genetic factors and the socio cultural factors. The socio-cultural factors consider the process in which the parental background and the local community influence individual aspirations and attainments. In the institutional factors, formal education plays a central role since it is the primary mechanism by which people acquire skills beyond those passed on by their family and through which they enhances their productivity. The presence of intergenerational educational association between parents and children in Italy is assessed and its link with future similar individual occupational careers. Consequently, the attention moves to the economic factors, especially for causes that can limit investments in education such as liquidity constraints, the opportunity cost of schooling and the existence of inadequate return to human capital investments. The chapter concludes in analysing the interaction among economic and social factors, especially on the role recovered by the family and the local community in influencing the individuals' entrance into the labour market. The use of informal methods is explored with consideration of their possible consequences in affecting job-worker mismatch, and the repercussions on the return from education. The uses of legal and illegal forms of family interference to enter in the Italian labour market are explored.

The third chapter discusses social mobility, equality and efficiency. It addresses the link between social mobility and equality of opportunity and why the extent of intergenerational mobility is relevant in assessing the degree of "openness" of a society. The influence of social origins in the possibility of achieving the available social destinations is interpreted, by many authors, as a measure of inequality of opportunity.

Thus, the difference and the link between equality of opportunity and equality of outcome are coherently investigated. Further exploration of the meaning of acceptable and unacceptable inequality is made, that is, inequality is due to unequal efforts, or inequality is due to unequal circumstance beyond individual control, respectively. Some cases in which policy intervention could be of benefit in improving disparities in circumstance are explored as well as the impossibility of equalizing all situations of departure. Equality of opportunity is a basic element to have social mobility. It is further explored with regard to human capital accumulation that recovers a central role in modern societies. The specific differences between human capital accumulation and physical capital accumulation are discussed, underling the unrelated relevance of social mobility between these two concepts. Subsequently, the attention considers the role of social mobility and equality of opportunity in guaranteeing an efficient allocation of human resources in the labour market. Further attention is made to the role demonstrated by exogenous circumstance, such as family background, in the process of worker selection. The possible mismatch is discussed between workers' occupational position and their productive advantages, for example when individuals are hired for reasons unrelated to individual productivity or capacities. In addition, the link among suboptimal or inefficient allocation of human resources and return to education is studied. The last section considers the trade off between equality and efficiency and explains what is meant by efficiency. The chapter concludes with some considerations on the apparent effects of high levels of social mobility having on economic development, and the effect that economic development might have on social mobility. The fourth chapter continues the study of the concept of social mobility, shifting the attention to intergenerational economic mobility in relation with inequality of income. It is elucidated the importance of income with regards to many other aspects of individual life.

Insight is made as to whether beyond an advanced point of income inequality could negatively affect social mobility. Wide distances between the top and the bottom levels of the society may have a particular effect in producing competition among individuals as less equal, thus affecting intergenerational social mobility. To address this issue, theoretical literature on the possible correlation is analysed. Despite a casual link between the two variables not being established, the chapter reports a number of empirical studies, which try to analyse the existence of a possible correlation between

intergenerational social mobility and inequality of income. The so-called Great Gatsby Curve draws a relationship on both dimensions to establish whether current severe inequality forces family background playing a significant role in determining the adult outcomes of young people, making it more likely for a transmission of socioeconomic positions from parents to children. To shed light on the Italian society, both aspects are singularly studied. Moreover some studies, through quintile regression or transition matrices, attempt to assess the degree of mobility according to the different quintiles of the income distribution in the Italian society. The chapter concludes in investigating the effect that growth may have on increasing or reducing inequality and vice versa. The situation in which a society experiences the so-called inequality trap, signifying the presence of wide inequality and social immobility, is investigated with regard to its impact on a country's development.

The aim of the thesis is to fully understand the concept of intergenerational social mobility and to assess its degree of presence in the Italian society. The dissertation contributed in elucidating the Italian social mobility pattern. A divergent result emerged by analysing absolute or relative mobility. Although Italy experienced high levels of absolute mobility due to the industrialization process, its relative level of mobility did not substantially improve. Relative mobility is the social fluidity of a society, thus the easiness of passing from a socioeconomic position to another, according to individuals' efforts and talents. In Italy, individuals' outcomes are largely influenced by family background compared to other developed countries. As a result, the Italian society represents not being an open and meritocratic society since circumstances beyond an individual's control are considered, reducing the importance of individuals' efforts. Educational attainments, occupational career and perceived income are often influenced by individuals' provenience.

In analysing the factors that usually hamper or foster social mobility, some specificities of the Italian society were discovered. Empirical evidences often support theoretical arguments that explain that some of the factors considered, create obstacles for the achievement of a greater degree of intergenerational social mobility in Italy. Sociocultural and economic factors interplay between them in creating a system not inclined to reward and incentive individual efforts and abilities.

The thesis establishes clarification in the relationship among mobility, equality and efficiency. Resulting in the emergence of the crucial difference between equality of

opportunity and equality of outcome. Nevertheless, the concepts are tightly correlated. In fact, equality of opportunity makes inequality of outcome just and fair, hence acceptable. If equality of opportunity is not respected, it follows that circumstance prevails over efforts and such kind of inequality retained is unacceptable. Such inequalities attract great concern because they are ethically unjust and unfair, in addition, they are alarming also in their possible effects on a country's efficiency. A society, in which efforts and abilities are not incentivised and rewarded, will be more probable to inefficiently utilise its human talents. Due to the fact that human capital is "inherently attached to the person", and to fully maximise its use, no obstacles in its investments should exist. Similarly, equality of opportunity resulted to be crucial also for in the labour market, if respected, it brings an efficient allocation of human resource. Contrarily, if family background influences an individual's entrance into the labour market, this may hamper social mobility. As a consequence, it increases the probability that individuals will be allocated in the positions that do not maximize their productivity, leading to suboptimal equilibrium.

In investigating social mobility and inequality of outcome, the possible relation between intergenerational social mobility and inequality of income is simultaneously studied. Consequentially, an interesting correlation becomes apparent. Through the Great Gatsby Curve, that relates the two dimensions, light is shed on countries with more unequal income distribution appearing to also being the least mobile. Income revealed to be significantly relevant for numerous aspects of individual life. Resulting in wide disparities between the top and the bottom levels of the society, which seem to create obstacles to the equality of opportunity, making competition among individuals increasingly unfair and thus reducing intergenerational social mobility. Italy is one such country where this relationship is confirmed. As a matter of fact, she simultaneously presents both high income inequalities and low levels of intergenerational economic mobility. A casual link between these two variables is not established, however large inequality appears to increase the relevance of family background in determining the adult outcomes of their children. Inequality and immobility create the so-called "inequality trap", it means that advantages and disadvantages are transmitted across generations and such situations are proven to be inefficient for a country's development.

Chapter 1

Analytical study of intergenerational social mobility and empirical evidence for Italy

1.1 Introduction

It is not an easy task to define social mobility with a single definition. Social mobility is related to individual movements, variations through the socio-economic positions in a stratified system. It can be studied from both a sociological as well as an economic point of view.

It is a wide phenomenon that can be measured by several different indicators that are correlated between each other, as will be analysed in this chapter. The classical elements taken into account to evaluate the socio-economic positions of individuals are “income, consumption, education and occupational prestige” (Checci and Dardanoni, 2003: 115). Social mobility in sociology has occupied a preeminent position. Sociological approaches traditionally focus their attention more on occupations connected to social class mobility. Occupations are employed due to increasingly updated sources suggesting that in a society based on market economy, occupations are the main factor affecting individuals’ positions in the social stratification system and are considered a good indicator for the socio-economic position. Transition between occupations is considered as a transition between social classes. On the contrary the use of economic theory to interpret social mobility is more recent. Economic approach frequently focuses more on income and earning mobility, and other socioeconomic factors as occupation have started to be taken into account as well because of its relations with economic mobility. Indeed, in much analysis on the intergenerational transmission of earnings parental occupation is used as a main background variable. In this chapter the focus is primarily on intergenerational occupational mobility, however in the following chapter, educational as well as earning mobility will be taken into account.

These individuals' movements through the socio-economic strata are able to occur in different timeframes. Such as in one’s lifetime, and it is called “intra-generational mobility” or across generations “inter-generational mobility” a difference that will be

better analysed in the next section. The dissertation's focus is on intergenerational social mobility; it shall investigate "the relationship between people's current circumstances and those in which they originated" (Breen, 2004: 5).

It is important also to define the distinction among absolute and relative mobility. The studies of social mobility usually distinguish among absolute and relative mobility. As a matter of fact a society can experience different levels of mobility thanks to change in its social structure. As far as occupational mobility is concerned, absolute mobility rate capture the movements associated to a different distribution of the occupational position of which the society is made up. Relative mobility investigates if the "chances of being found in one destination class rather than another are the same for everybody regardless of social origins" (Breen, 2004: 4). For this reason it is also called social fluidity and it is closely related to equality of opportunity as will be examined in the following chapters. Relative mobility rates are analysed in the form of odds ratios. Other statistical means are used to analyse social mobility such as regression and log-linear models. Through these instruments sociologists and economists are able to describe the social mobility within and across countries.

A society that displays high levels of social mobility is considered an open society and not a society with a rigid stratification. A society would be characterized by perfect mobility if the chances for individuals, to reach a determined socio-economic position or job, would be the same regardless of origins. High levels of relative mobility or social fluidity mean that the socio economic status is earned by individual effort and capacity and people's success is a function of their individual abilities rather than the wealth or position of their parents or other family members. In considering social mobility it is fundamental to acknowledge the difference between ascribed and achieved status that measure the extent to which a certain socio-economic position is determined by accidents of birth, meaning by inherited advantages or disadvantages or it is reached due to personal abilities, skills, ambitions and talents. Conversely in a society where there is low social mobility there is a strong association in socio economic position among parents and children.

The focus of this dissertation is to investigate the level of association between the father's socio-economic position and the children's future attainments. Specifically assessing the degree of mobility concerning intergenerational occupational mobility in Italian society. Through the so called mobility tables it is possible to see if there has

been high or low level of father-son occupational position association in a society, "how characteristic of the family of origin are associated with labour market outcome indicate the degree of openness of society" (Breen and Jonsson, 2005: 223) A strong intergenerational association indicates that socioeconomic position is closely replicated across generations. "A weak association indicates that individual attainment is relatively independent from social origins, such that individuals of different social origins have a similar chance to succeed or fail. Intergenerational mobility is simply the opposite of association: A weaker intergenerational association identifies a higher level of mobility" (Torche, 2013: 1).

According to empirical literary works in modern society, social origins influence has been reduced by the "increasing complexity of modern labour forces and then the shift in the occupational structure towards industrial and then to service employment should also weaken the tendencies toward direct inheritance of class position" (Breen, 2004: 6). Before industrialization people were much more dependent on their extended family to attain an occupation. The process of economic development, the introduction of the factory system in the years of the Industrial Revolution with all the innovations that it has brought, of course affected the structure of occupations and it has brought higher level of absolute mobility. At the same time absolute mobility does not lead automatically to relative mobility as mentioned above and as will be shown through the empirical investigations reported in that work. However the changes in the occupational structure have brought to the requirement of occupational skills other than the skills passed on in the family. The division of labour has become more complex and therefore the job positions should be filled according to the skills and training of the applicant rather than ascribed criteria. As a consequence these changes should have an impact also on relative social mobility. The chapter will demonstrate this across countries' comparisons and specific analysis on the Italian pattern of social mobility both divide in absolute and relative mobility. These empirical analyses are useful to understand the historical trends of the Italian society and its position in relation with other countries.

The rest of the chapter is organized as follows. Section 1.2 defines social mobility. Section 1.3 describes the main indicators used to measure social mobility and the problematic aspects connected. Section 1.4 presents theoretical and empirical researches on cross-country trends in intergenerational social mobility with specific attention to

intergenerational occupational mobility. Section 1.5 gathers different investigations on Italian intergenerational social mobility pattern.

1.2 Definition of social mobility

To completely understand the concept of social mobility it is useful to make a distinction between some of its aspects. One of the first important distinctions is among intra-generational and inter-generational mobility and among absolute and relative mobility. Generally social mobility is connected to movements and changes over time regardless of the parents' social origins, these changes can occur in a different timeframe and it is important to understand where these changes come from.

The fundamental distinction between intra-generational and intergenerational mobility lies in the timeframe. The former refers to changes in socio-economic positions over a person's lifetime, the latter refers to changes that occur across generations. Intra-generational mobility shows the movements up or down from one socioeconomic level to another over a single lifetime. Inter-generational mobility reflects the extent to which individuals move up or down the socio-economic ladder compared with their parents, this type of mobility is focused on changes across generations. "Intergenerational mobility is defined as the extent to which the key characteristics and outcomes of individuals differ from those of their parents, and intergenerational immobility can be defined as the extent to which these key characteristics and outcomes for children are similar to those for their parents" (D'Addio, 2007: 10).

Intergenerational and intra-generational mobility might be strongly connected. The former can be the starting point for the latter. If the socio-economic origins of a family strongly influence the attainment of the offspring there will be further complications if the initial position in the labour market has a strong impact on the following career (Ballarino and Barbieri, 2012). There are societies characterized by double immobility. However this dissertation's focus is on intergenerational social mobility. Social mobility can be divided also in horizontal and vertical mobility. The former concerns movements in similar socio-economic positions. The latter, on the hand, concerns movements from one socio economic position to a higher one (upward mobility) or a lower one (downward mobility). With regard to intergenerational occupational mobility upward

mobility is an improvement in the child's occupation with respect to the parental one; downward mobility is a worsening of it.

The second important distinction related to social mobility is among absolute and relative mobility. It is a relevant distinction that is usually made in the empirical analysis of social mobility. Absolute mobility concerns "observed flows of individuals from each class of origin to different classes of destination" relative mobility concerns the "disparities in the chances of arriving at certain destination between people from different social origins" (Schizzerotto and Marzardo, 2008: 6). As far as intergenerational occupational mobility is concerned, absolute mobility is associated with changes in the occupational structure. These changes may stem from socio economic transformation of a society. As a result the consequent of mobility is due to a different distribution of the position making up the system. It reflects simply the total amount of movement between origins and classes' destination, the overall proportion of mobile individuals in order to examine historical trends and how changes in class structure impact mobility.

On the other hand relative mobility captures the association between origins and destination categories net of the effects of the marginal distribution of these categories. It describes if the "chances of being found in one destination class rather than another are the same for everybody regardless of social origins, means that family background does not intervene and so there is perfect mobility" (Breen, 2004:4). For this reason it is also called social fluidity. There are several researches that analyse the relation between the occupational class of origins, intended as the socio-economic status of parents, and the status that their children will attain, thus the occupational class of destination. If the family background does not influence reaching a determined position, a society will display a high level of mobility. In contrast, if a society displays high levels of immobility, it is a rigid and stratified society; due to individuals born in a specific position tend to follow in their father's footsteps, remaining in a similar occupational position. It is important to analyse the reason why a society shows rigidity because such rigidity or immobility may be due to disparities in the opportunity. Indeed the concept of mobility is strongly related to equality of opportunity. A society that guarantees equality of opportunity is a society in which socio-economic positions are reached regardless of social origins. As a consequence there are no barriers that impede some achievements and inherited advantages or disadvantages, determined by accidents of

birth, that do not play a strong role on a individual's future attainments. As a consequence there are no disparities in the possibility of achieving a position. "The equal-opportunity framework stresses the link between the opportunities available to an agent and the initial conditions that are inherited or beyond the control of this agent" (O'Neill, 2008: 2) thus to what extent are future opportunities limited? Actually some societies display high levels of associations between class of origins and class of destination. High levels of relative mobility or social fluidity mean that the socio economic status is earned by individual effort and capacity. Conversely in a society where there is low social mobility there is a strong association in socio economic position among parents and children. A strong intergenerational association indicates that socioeconomic position is closely replicated across generations. In the following section, the principal indicators used to measure social mobility and for what reason is it used for occupational mobility, shall be described.

1.3 Indicators and problems in measuring intergenerational social mobility

Social mobility is a general concept that includes different aspects. As a consequence it can be measured and studied from different points of view. Intergenerational social mobility "is measured by several different indicators since no single indicator provides a complete picture" (Causa and Johansson, 2009: 2). Different researches use different indicators to describe social mobility giving attention to distinct particular aspects of the same phenomenon. The main indicators used to measure it are occupation, income and education. All of these aspects when considered together give a complete and comprehensive picture of the phenomenon. In a "relatively immobile society an individual's wage, education or occupation will tend to be strongly related to those of his/her parents" (Causa e Johansson, 2009: 5). These different aspects that compose social mobility interfere with each other, and often can conceive a causal link between them. Despite the interaction between these aspects of mobility, it is important to treat it separately because they respond to different dynamics and are calculated in a different way.

Analyses on intergenerational social mobility are carried out by means of either mobility tables or log-linear models, regression analysis or multinomial and ordered

logit analysis. Several log-linear models have been developed in the social mobility literature and these are often used as reference models (for an accurate description of the log-linear model see Erikson and Goldthorpe 1992; Pisati 1997; Breen 2004; Schizzerotto and Marzardo 2009).

In measuring intergenerational social mobility there are some problems that are common to all the indicators. A first problematic aspect is related to the collection of the data. Indeed to carry out similar analysis, it is crucial to have a long time series data as well as a large sample. These are not always available and reliable. Moreover, intergenerational studies are usually done along the gender line father-son. There are many researches that take into account gender-line mother-daughter but in this dissertation almost all data refers to father-son line, also for the reason that "the occupational careers of women are so much more complicated [than those of men] that they require additional considerations" (Ganzeboom and Treiman, 2007: 17) indeed there are specific studies about female intergenerational occupational mobility compared with male patterns. A second problem faced in studying intergenerational mobility is that we need data for members of two different generations who lived in two different periods of time so there can be important socio economic differences.

Similar difficulties arise also when comparing two or more different countries. First of all data and studies may regard different periods of time, thus different moments of a country development, potentially reducing the value of the comparison. Secondly the main findings and studies on social mobility are based on information collected by national dataset, thus some researches on occupational or educational mobility might be scarcely comparable, as it may lack a data's homogeneity due to differences in the survey design. These problems can be solved thanks to the existence of homogenous international classifications promoted by different authors and promoted by international and supranational organizations. Regarding occupation in social mobility, literary works have been widely used as an occupational classification elaborated by John Goldthorpe and Robert Erikson in 1979 and successively modified. This scheme is known as the EGP schema and it considerably influenced the current international classifications. The European Socio-economic Classification (ESeC) is based on it.

The principal of difficulty in cross-country comparisons is harmonizing to a common classification of the different, detailed and crude national occupational classifications. There is different data from different countries. The amount of information changes

over time and reliability of the data may vary indeed as there can be important differences in the quality of the surveys. Often national surveys are carried out according to different occupational classifications and there can be important difficulties due to heterogeneous classifications. The merit of certain organizations is that they regularly demand to the national governments of providing data over the socio-economic situation of the country. This allows for gathering data relative to the same periods so that cross-country comparisons can refer to the same period. These data is usually furnished according to a common classification provided by the demanding organization.

In addition to these technical problems there is a major problem in cross-country comparisons that is related to the relativity of each society. Social mobility is a function resulting from the combination of many different factors such as non-economic, institutional and economic factors and a variation in mobility is related to these variables. As a matter of fact the variables that affect social mobility are specific and different in each country. Therefore mobility varies among nations. If nations differ in their level of development, the levels of occupational mobility will also vary. As a consequence, it is difficult for international comparison, moreover they do not exist neither "a desirable level nor an international benchmark for mobility" (OCED, 2010a). However, thanks to studies and researches that have sought to compare countries, it is possible to observe the degree of mobility in each society and how it may differ across countries and this egg on investigating the specific factors and the channels which hamper or promote mobility in each society.

Beyond these common problems related to social mobility in general, each indicator has its peculiarities. One of the most used indicators is income. Many economic researches calculate, through the econometric model, the income mobility so "the percentage difference in earning in the child's generation associated with the percentage difference in the parental generation" (Corak, 2013a: 1). It includes substantial different variables and it is affected by various temporary factors as economic fluctuations and for this reason it is possibly difficult to calculate. In estimating earning mobility there can exist a bias if parents and children are observed at "different points in their life-cycle" (Lorraine et al., 1997: 49). "Sociologists have since long argued that because of temporary income fluctuations and measurement errors, mobility in terms of yearly income is a misleading upwardly biased indicator of mobility if the goal is to measure

transition between long term economic status" (Ichino et al., 1999: 354). However Solon (1992) and Zimmerman (1992) proposed averages of individual income on subsequent years "if several consecutive years of parent's income data are available one can average the data to overcome bias in regression estimates due to transitory income fluctuations" (Lorraine et al., 1997: 50). Yet to obtain real information about individual's income might not be as simple as can be expected and the importance of the data is crucial. Information about "self-employed earning is missing or measured less accurately, thus limiting the value of the analysis" (Björklund and Jäntti, 2008: 8). Moreover these problematic aspects over the availability of exact data are worsened if the research is conducted in countries where there are high rate of fiscal evasion and the low reliability of the legal statements of income. In fact the data on income derives from sample surveys and administrative archives, the risk of the former is of under reporting so that is declared a lower income than the effective income. For what concerns the administrative data there is the risk of evasion. These problems may invalidate the analysis. Notwithstanding these problems, social mobility considered in its economic aspects can be easily correlated with other macroeconomic variables.

A second indicator used to measure social mobility is education. Educational mobility concerns the study of the effects that family background and parent educational level have on educational attainment of the children (Tverborgvik et al., 2013). The difficulties arisen by educational mobility are prevalently related to cross-country comparisons given the still important differences between national educational systems. Although one strategy that seems reasonable, consists of comparing the probabilities of reaching the highest educational degree offered by the schooling system of each country (Ichino et al., 1999). Within a society the obstacle is similar, what is considered the minimum and maximum educational level change over time. School attendance varies according to the degree of development of a society. Thereby, it can be useless to assess the degree of offspring's mobility or immobility on educational attainments compared to predecessor's educational attainments without considering the overall socio-economic changes that affected school attendance.

The final classical indicator used to measure the degree of mobility within a society is occupation. Occupational mobility is the "correlation between parents and their children in occupational choices" (Emran and Shilpi, 2011) and it is considered a good "indicator of economic status" (Ichino et al., 1999). It is considered important because "it

correlates with long-term socio-economic status of individuals and it less subject to transitory shocks than incomes" (D'Addio, 2007: 51). In the sociological literature, occupation has been considered a solid proxy to evaluate the socio economic position of individuals. In addition, it seems an adequate indicator to measure social mobility also because of data availability; "accurate income data for the parental generation are very unlikely obtained by simply asking about their fathers' income. Such retrospective questions are more likely to be reliable for finding out the father's main occupation and social class" (Björklund and Jäntti, 2008: 2). However, some authors believe that data regarding social status and occupation "does not generally allow for easy and reliable comparison of mobility measure over time and across countries, given the substantial variability of occupational categories and social status scales" (Piketty, 2000:431). In particular for what concerns education and occupation, there exist difficulties in comparison across countries to harmoniously classify, to a common key, a singular crude national classification. While earning mobility does not present this problem since salaries, wages, incomes are commonly calculated in dollars; regardless it presents other kinds of complications. Nevertheless, standard classifications to rank occupations have been created to obviate these problems, as explained above. A relevant problem is that, when the occupational indicator is used, the analysis are focused on those who work, therefore individuals in the top or in the bottom of the society, meaning that the extreme margins of this spectrum, that is the very poor and the very rich, are not entirely taken into account.

However occupational mobility is considered a valuable indicator to measure social mobility. Indeed it has been used also for evaluating income mobility: "economists speak of permanent income, and in some case take multi-year averages to proxy this concept. Sociologists make use of status or social prestige indices (like the Duncan index) associated with seven occupations. An intermediate position suggests the use of the median income associated to each occupation as a better proxy of the social status" (Checchi, 1997: 8). In several studies on the persistence of income across generations, the investigation is conducted by considering parental occupation as a background variable to assess the impact of the family background on the next generation's incomes. At the same time, occupation and income being interchangeable may be erroneous. In fact, individual's income can be different from the father's income although they are part of the same occupational category. A dynasty is considered immobile if the occupation

of the son is the same occupation of the father "even if, in terms of individual incomes, it experiences downward mobility" (Ichino et al., 1999: 354). Nonetheless the two indicators are undoubtedly intimately related. Indeed occupational mobility is taken into account also for its relation with the distribution of income and wealth, in fact the "changes in occupation are one cause of income mobility" (Gangl et al., 2007: 2). The reason of income persistence across generations can be due to persistence in the occupational positions. Household's income is strongly influenced by the wage. "Earnings are the largest component of household income and, as a result, they play a key role in shaping changes in income inequality" (OECD, 2008: 78). The extent of intergenerational income mobility, among other factors, may depend on "income distribution i.e. mobility is lower at both the top and the bottom of the distributions in many countries" (D'Addio, 2007: 44). Intergenerational income mobility shows to be lower in countries with high inequalities, thus where income is unequally distributed among individual (Corak, 2013b); a relationship called the Great Gatsby Curve. This relationship will be widely treated in the last chapter. Various researches showed that in some countries high level of occupational immobility are found in the highest and lowest occupational positions. To attain the highest occupational position, often is required a high educational degree. Indeed occupational immobility can be preceded by intergenerational educational immobility. Between the three indicators, a vicious circle could arise, however that will be clarified in the next chapter. The educational level and the occupation of the parent can influence the future educational attainment of the children, which in turn likely define their possible future occupational career and the relative earning. Various studies show that occupational persistence depends on education. At the same time income can be highly relevant for parent investment in their children's education. "Family economic conditions in early childhood have the greatest impact on achievement, especially among children in families with low incomes (...) and are important determinant of completed schooling" (Duncan et al., 1998: 406). An emerging body of evidence suggests that "more inequality of incomes in the present is likely to make family background play a stronger role in determining the adult outcomes of young people, with their own hard work playing a commensurately weaker role" (Corak, 2013b:1). As a consequence the family income may influence directly or indirectly to educational attainment. In turn, education influences the future occupational career and it "is major contributor to intergenerational income mobility"

(D'Addio, 2007: 4). It is clear that the three indicators interact and influence one another, making it impossible to carry out a complete analysis without considering all of them.

A society with low levels of social mobility is associated with the transmission of advantages and disadvantages that condition education, occupation and income although if in a different way. Moreover some authors interpret the intergenerational transmission of advantages or disadvantages as a cumulative process. DiPrete and Eirich (2006) described the intergenerational transmission of the socio economic status with the characteristic of a cumulative advantage. The idea is that "the advantage of one individual or group over another grows (i.e. accumulates) over time" (DiPrete and Eirich, 2006: 272) it is like a sum of many little advantages linked to the social origins that can produce some advantages over others which are not justified by merit, nor personal talent nor ability.

In the following section some empirical researches will be presented that attempt to rank countries according to the degree of social mobility with specific focus on occupational mobility and then will be subsequently investigated the in Italian pattern.

1.4 Cross-country comparison of intergenerational occupational mobility

In this section some analysis are gathered concerning the comparison of occupational mobility in a number of countries. In this way we will eventually have an overall picture of which countries have a higher or lower level of intergenerational social mobility and in which position Italy is ranked. Internationally comparative studies initiated during the past 20-25 years and there have been different theories about the general trend followed by industrialized nations.

Some authors state that there have been little variations among countries and that the mobility trend goes toward greater mobility or stability. Liberal theory is often associated with the work of functionalist sociologists (Parsons 1960; Kerr et al. 1960). It has emerged for stating that the industrialization process would lead to higher absolute mobility and this would have increased the level of competition and hence the need of recruiting on the basis of meritocratic characteristics. In turn this should generate greater degree of equal opportunity and therefore more independence from

parental background and social origins. To increase and develop the characteristics and the productivity of individuals, education would gain increasing importance. And education would also become more meritocratic and less dependent on parental status. Acting as equalizer and as a consequence reducing immobility. All these processes should eventually lead to a sort of convergence between countries. On the opposite side, Marxist theory has asserted that industrialization increased the rigidity of the system. That there has been a downgrading of the class structure and that the barriers between classes have grown bringing to a stratification that clearly does not leave room for occupational mobility.

There are other relevant theories that do not seek to predict historical trends. Notwithstanding they have different expectations about inter-country possible path. Some authors think that there will be large cross-national differences in mobility due to specificity in the factors that underpin mobility. On the other hand, there are authors that agree and support the Feathermen, Jones and Hauser (FJH) hypothesis (1973). FJH hypothesis made a distinction between phenotypical and genotypical that corresponds to absolute and relative mobility. They affirm that although the former may vary between countries, the latter does not. "The genotypical pattern of mobility (circulation mobility) in industrial societies with a market economy and a nuclear family system is basically the same. The phenotypical pattern of mobility (observed mobility) differs according to the rate of change in the occupational structure, exogenously determined (as far as an individual family is concerned)" (Featherman et al., 1975:340). Hence the absolute mobility concerns the changes in the occupational structure and cannot be anticipated because they depend on exogenous factors such as economic, technological and demographic circumstance that vary among society and so, there can be differences between countries. The phenotypical is the relative mobility or social fluidity among classes and should be similar across industrialized countries because it is a consequence of endogenous factors common to industrial societies. Therefore industrial societies characterized by market economy and a nuclear family system present that the relative mobility pattern should be the same (Featherman et al. 1975: 340).

Robert Erikson and John Goldthorpe's book (1992) *"The Constant Flux: a Study of Class Mobility in Industrialized Societies"* has given a precious contribution to social mobility literature. It is one of the most extensive comparative studies of social mobility and it has been used as baseline for other studies. The book is the result of the CASMIN

(Comparative Analysis of Social Mobility in Industrial Nations) project where national variation mobility was studied. Erikson and Goldthorpe, with their empirical findings, have argued for a slightly amended version of the FHJ thesis. They compared 12 European countries, namely England, Wales, France, Northern Ireland, Scotland, the Republic of Ireland, West Germany, Sweden, Poland, Hungary Czechoslovakia, Italy, and the Netherlands, as well as including non-European countries of the United States, Australia and Japan. For comparing they used a new log-linear technique to create models and were able to make a division between absolute and relative mobility.

For what concerns absolute mobility they have shown that there were trendless fluctuations and affirmed that "the structural contexts of mobility that are created by the development of industrial societies vary substantially — and so, in turn, then do their absolute mobility rates." (Erikson and Goldthorpe 1992: 325). In agreement with the FHJ hypothesis, occupational structure may vary between countries. As far as relative mobility or social fluidity is concerned they point out a common stability across industrialized societies, stating that there were few differences among countries in their pattern and level of social fluidity. The conditions under which mobility operate and so "chances of individuals of differing social origin achieving or avoiding particular destination positions (...) may not show wide variations" (Erikson and Goldthorpe 1992: 24). However they could not assert the existence of identical levels in the degree of mobility. In fact they have found that England and France were quite similar, while Germany and Ireland were defined as more rigid and close societies in opposition to Sweden that was considered vastly more open, along with the Netherlands. They also affirmed that it is possible to discover similarities in patterns of social fluidity "to the extent that no sustained effort has been made to use the power of a modern state apparatus in order to modify the process, or the outcomes of the process, through which class inequalities are produced and intergenerationally reproduced" (Erikson and Goldthorpe, 1992: 325) In fact they point out that state intervention in specific areas (which affect equality of opportunity) may influence the pattern of relative mobility. To explain the few deviations from the common pattern by some countries the authors have taken into account political institutions that may have an effect on mobility. Their interpretation was that "the unequal distribution of resources and power so permeates the social structure as to lead to a general and unchanging level of inequality of opportunity" (Breen and Jonsson, 2005: 229). The factors that bring to similarity

between countries are factors directly correlated with occupational classes. The characteristics of the classes are concurrent for a number of reasons (of which includes the idea of barriers to access, the relative advantages of individuals belonging to specific occupational classes, the existence of powerful actors that want to keep their positions and to transmit it to their children). For this reason they argued that "the common mobility regime that the hypothesis proposes has obviously to be understood as one that is highly resistant to change" (Erikson and Goldthorpe, 1992: 26).

There are a number of authors that find that they have overemphasized the similarities and did not give careful attention to the variations among countries. Indeed each society may reach the same level of intergenerational social mobility but through different processes. In the Erikson and Goldthorpe analysis there is an implicit rejection of the mentioned theories. Since there have been changes in the class structure (absolute mobility) however this did not lead to greater relative immobility nor mobility.

On the other hand there is other empirical research that presents differences and variation in the rate of relative mobility. The research of Harry Ganzeboom described in "*Intergenerational Occupational Mobility in Comparative Prospective*" (1989) is in contrast with the Erikson and Goldthorpe findings. Ganzeboom analyses intergenerational mobility for a larger number of countries, assessing the mobility pattern of 35 nations. They aimed to test the FHJ hypothesis of a common pattern for social fluidity and through regression equation they furnished an estimation of the variance between countries. "The large between-country and over-time component permits an unequivocal rejection of the hypothesis of cross-national and cross-temporal consistency in the degree of social openness" (Ganzeboom et al., 1989: 43). Their analyses show that although "there is a basic similarity in mobility pattern (...) at the same time there are substantial cross-national and cross-temporal differences in the extent of mobility (...) about a third of the variance across mobility tables is attributable to societal differences in mobility regimes" (Ganzeboom et al. 1989: 47). According to their finding there is not a common pattern of social fluidity and there are consistent variations among countries. However they point out that there is a gradual openness in almost each country although the levels change for each society.

One of the most recent comparative researches has been carried out by Richard Breen (2004). The Breen's investigation has taken the cited "*Constant Flux*" as its starting point but similarly to Ganzeboom's analysis his findings are at odds with those of

Erikson and Goldthorpe. A variation between countries' intergenerational social mobility has been found.

Similarly to other comparative research, Breen was divided among absolute and relative mobility. He analysed 11 countries: Britain, France, Ireland, West Germany, the Netherlands, Italy, Sweden, Norway, Poland, Hungary, and Israel. Covering the period 1970-2000. He sought to collect "the best quality data available from each of our eleven countries, but we still need to be aware of the potential for differential reliability and validity to induce spurious cross-national variation and temporal change." (Breen, 2004: 42) Moreover, to increase the validity and reliability of the data he used all possible available surveys for each country. Unfortunately, for some countries, such observations were lacking. As far as Italy is concerned there are no such observations for the decade of the 1970s. Nonetheless it is still useful to report this data to obtain the general trends.

For what concerns absolute mobility, it has been enunciated that the difference with relative mobility and its connections with the structural occupational changes underwent by a country. The Breen's analysis demonstrates that the countries taken into account reduce their occupational structure dissimilarity over decades. Table 1.1 shows the level of *dissimilarity indices*▲ among the occupational destination distribution of each pair of countries has been reported. Three decades were used 1970-9; 1980-9; 1990-2000. The principal aim was to see if there has been convergence in the class structure of the countries, looking at the distribution of the class destination.

Table 1.1 Between-country class destination dissimilarity indices by decade (men)											
	Year	FR	IT	IE	GB	SE	NO	PL	HU	IL	NE
Germany	1970	22.2	-	41.3	4.9	19.5	-	33.6	30.6	32.7	13.4
	1980	16,7	30,4	26.7	7.4	18.8	15.6	24.2	26.9	-	14.9
	1990	14,5	24.4	26.9	12.9	17.7	14.4	28.8	22.9	19.5	16.3
France	1970	-	-	20.0	18.7	16.6	-	17.8	20.2	16.8	19.5
	1980	-	17.0	13.2	14.4	16.2	14.3	13.2	20.5	-	19.0
	1990	-	17.7	12.4	17.9	16.8	14.0	17.0	16.9	9.3	23.6
Italy	1970		-	-	-	-	-	-	-	-	-
	1980		-	20.3	26.7	21.0	17.7	28.0	32.9	-	24.0
	1990		-	17.9	22.8	20.6	21.2	24.6	30.4	10.8	26.1
Ireland	1970			-	38.0	24.7	-	20.2	29.1	22.6	31.8
	1980			-	23.3	16.7	21.7	16.9	20.3	-	24.2
	1990			-	22.7	18.3	18.2	10.9	30.5	16.0	28.8
Great Britain	1970				-	16.6	-	29.4	25.8	29.7	14.0
	1980				-	15.5	12.3	21.3	25.3	-	10.7
	1990				-	12.7	11.1	25.8	27.6	16.9	12.1
Sweden	1970					-	-	30.4	25.2	14.8	12.7
	1980					-	7.4	28.0	25.9	-	13.2
	1990					-	9.8	22.4	24.9	13.7	16.8
Norway	1970						-	-	-	-	-
	1980							26.5	32.8	-	9.5
	1990							27.0	29.4	16.6	11.1
Poland	1970							-	29.6	32.8	31.1
	1980							-	22.5	-	25.5
	1990							-	17.4	18.0	36.2
Hungary	1970									25.8	33.4
	1980									-	31.3
	1990									23.9	35.0
Israel	1970									-	24.3
	1980									-	-
	1990									-	23.8
Source: Breen 2004											

The declining average in the table 1 represents a general pattern of convergence in the occupational structure of the countries taken into account. It is possible to note that in the 70s, the differences between countries were substantially larger than those in the 1990s. Indeed the Δ (dissimilarity indices) in the 1970s was 24.2; in the 1980s it was 20.2; and in the 1990s it was 19.7. The average of course is influenced by the different trends in the countries. This can be explained by the differences between those countries that on one side were characterized by a large farming sector and on the other side those where the farming sector accounted for a very small share of the workforce. Countries belonging to this last group were Britain, Netherlands and Sweden. Countries that were part of the first group were Ireland and Poland. Since over time in many countries the agricultural sector experienced a reduction, the Δ (dissimilarity indices) for these countries has also been reduced in comparison to other countries. As a consequence, the occupational class structure and the distribution of the class of destination were becoming similar. Italy in the 80s presented low dissimilarity with France and Norway and high levels of dissimilarity with Germany, Hungary and Poland. In the 1990s the lowest dissimilarity in the occupational structures is with France, Israel, and Ireland, whilst the highest dissimilarity is with Poland, Hungary, Germany and Netherlands.

In table 1.2, the occupational class structure for each country in the reported decades is represented. The working categories are classified by Breen according to the CASMIN (Comparative Analysis of Social Mobility in Industrial Nations) scheme, that is, the EG scheme mentioned in section 1.3. As a result the following classification is utilised:

I + II - Service class	Professionals, administrators and managers; higher-grade technicians; supervisors of non-manual workers
III - Routine non-manual class	Routine non-manual employees in administration and commerce; sales personnel; other rank-and-file service workers
IVab - Petty bourgeoisies	Small proprietors and artisans, etc., with and without employees
IVc - Farmers	Farmers, small holders and other self-employed workers in primary production
V + VI - Skilled workers	Lower-grade technicians; supervisors of manual workers; skilled manual workers
VIIa - Non skilled workers	Semi- and unskilled manual workers (not in agriculture, etc.)
VIIb - Farm workers	Agricultural and other workers in primary production

Table 1.2 Destination distribution for men in three decades													
	DE	FR	IT	IE	GB	SE	NO	PL	HU	IL	NL	Mean	Variance
1970s													
I+II	33.2	17.4	-	12.9	30.6	28.5	-	18.6	14.5	15.4	36.8	23.1	82.9
III	9.5	9.6	-	7.4	9.5	9.0	-	2.7	9.3	11.2	9.7	8.7	5.9
IVab	6.0	9.9	-	9.1	5.2	9.5	-	1.9	1.9	20.0	7.8	7.9	29.9
IVc	2.1	9.6	-	22.4	1.5	4.1	-	26.0	0.6	5.4	5.4	8.6	86.4
V+VI	36.9	30.5	-	17.9	36.0	23.2	-	28.7	30.8	21.9	23.5	27.7	42.5
VIIa	11.7	20.2	-	23.9	16.1	25.7	-	19.1	28.3	25.3	14.7	20.6	32.1
VIIb	0.7	2.8	-	6.4	1.1	0.0	-	3.0	14.6	0.7	2.2	3.5	21.1
1980s													
I+II	35.4	22.6	19.9	18.3	37.1	31.7	35.2	23.1	20.8	-	41.6	28.6	72.1
III	8.6	10.7	14.6	9.0	7.4	10.4	12.0	3.2	4.7	-	9.9	9.0	11.3
IVab	7.0	9.4	20.9	7.9	8.2	9.8	9.7	5.1	2.3	-	5.4	8.6	24.2
IVc	2.1	6.6	5.4	11.4	1.4	2.8	4.7	18.5	1.0	-	3.3	5.7	29.3
V+VI	36.0	32.1	21.1	26.4	30.6	21.4	20.7	31.5	33.5	-	22.8	27.6	33.6
VIIa	10.3	17.2	15.0	24.1	14.4	23.9	17.4	16.4	28.3	-	15.7	18.3	29.7
VIIb	0.6	1.5	3.1	3.1	1.0	0.0	0.4	2.3	9.5	-	1.5	2.3	7.5
1990s													
I+II	38.1	25.3	24.6	20.2	42.3	34.6	38.4	19.4	20.8	26.3	49.0	30.8	101.8
III	8.4	11.2	17.8	14.2	7.0	10.0	12.0	4.0	4.5	11.0	10.6	10.1	16.2
IVab	6.6	9.0	18.8	9.3	9.9	11.5	7.9	13.2	6.2	17.4	4.1	10.4	21.0
IVc	2.2	4.5	2.3	9.3	0.9	1.8	4.3	12.0	1.6	2.4	2.2	4.0	12.24
V+VI	34.9	33.2	23.9	25.9	25.6	21.7	20.5	29.2	34.2	27.7	21.0	27.1	27.6
VIIa	9.1	15.4	9.8	18.8	13.2	20.4	15.3	19.3	25.3	15.1	11.6	15.7	23.8
VIIb	0.7	1.5	2.8	2.4	1.0	0.0	1.6	2.9	7.4	0.2	1.3	2.0	4.1
Source: Breen 2004													

The mean column represents the overall changes in the class structure. It is possible to note that the category "Service class" (I+II) and Petty bourgeoisies with and without employees (IVab) from 1970 to 2000 grew consistently. At the same time the farming sector represented by the category "Farmers" (IVc) and "Farm workers" (VIIb) substantially decline. In addition, the "Unskilled manual workers not in agriculture" (VIIa) underwent a reduction. Notwithstanding they account for a large part of the

occupational structure. The "Routine non-manual class" (III) slightly increased while "Skilled manual workers, technicians, and supervisors of manual workers"(V+VI) remained stable over the three decades. However looking at the occupational structure of each country it is possible to note that some differences persist.

In Italy the two predominant sectors, in harmony with the overall trends, are the "Service class" (III) and the "Skilled manual workers, technicians, and supervisors of manual workers" (V+VI). However the percentage of workers in these occupational positions is smaller compared to the overall mean. The Service class (I + II) over the decades increased more in France, Italy, Ireland, Poland and Hungary where it arrived at around 25%, yet it is considerably more predominant in Germany, Britain, Sweden, Norway and Netherlands where it accounted for 35% or more of the occupational structure. "Skilled manual workers, technicians, and supervisors of manual workers" (V+VI) is the second largest sector in Italy, however compared to other countries, the percentage of workers involved in these activities was lower in the 1980s and remained one of the lowest in the 1990s. The "Unskilled manual workers not in agriculture" VIIa decreased over the years in each country and it continued to be lower in Italy in respect to other countries. The skilled and unskilled manual workers (V + VI; VIIa) called "the working class" has accounted for 40-50% of the class structure in many countries, however this is not evident in Italy where it is at 34% nor in Britain (39%) and Norway (36%).

What stands out the most in Italy is the "Petty bourgeoisies with and without employees" (IV ab) and the "Routine non-manual class" (III) in comparison with the other occupational structures are quite relevant. Indeed Italy is the country with the highest percentage of workers engaged in these activities. This class includes self-employed and small proprietors. In Italy, despite this class decreased, she has consistently accounted for 19% of the occupational positions. Despite the two classes representing overall growth, the "Petty bourgeoisies with and without employees" (IV ab) has actually declined in many countries. The overall growth of this class is due to the fact that it has strongly increased from 2% to 13% in Poland, Sweden and Britain and in some countries, such as in Italy, it has remained quite consistent.

As far as the farming sector is concerned, the Italian path has to follow the general descendant trend. Only in Ireland and Poland the farmers continue to account for a high percentage of the active population.

Through this analysis of the occupational structure and its transformation over time, the concept of absolute mobility should be more concise. It refers to the overall changes due to shifts in the social structure, as when a rapid decline of farmers leads to increased mobility out of that class. Industrialization, urbanization, post industrialization, the end of the communism in some countries and other socio-economic factors lead to different distributions of the occupational positions making up the system. Absolute mobility captures these movements but does not mention anything about the fluidity of the system; which is the possibility of being found in one destination class rather than another regardless of social origins.

It is important to bear in mind that despite of a high rate of absolute mobility, a society may display low levels of relative mobility or social fluidity. In table 1.3, the overall rate of absolute mobility in the last three decades and specifications of the relative

Table 1.3 Percentage mobile by country in each decade													
	GE	FR	IT	IR	GB	SE	NO	PO	HU	IL	NE	Mean	Variance
Total mobility													
1970s	61.6	66.6	-	56.7	63.0	70.8	-	59.4	77.5	74.4	66.3	66.3	48.0
1980s	62.1	67.5	69.5	61.3	61.8	71.4	71.9	61.0	74.9	-	67.7	66.9	25.8
1990s	60.3	67.0	72.1	66.1	60.8	71.0	68.1	67.4	71.6	74.3	65.7	67.7	19.9
Vertical mobility													
1970s	44.1	43.8	-	39.9	50.7	54.0	-	40.9	53.0	43.7	50.6	46.7	28.5
1980s	45.8	45.9	40.8	42.6	50.8	54.7	55.2	42.9	55.8	-	54.1	48.9	34.6
1990s	46.3	46.3	46.3	45.5	50.7	55.2	52.1	45.9	53.7	50.4	54.0	49.7	13.9
Upward mobility													
1970s	31.7	25.9	-	21.6	32.8	35.1	-	22.1	26.9	20.1	36.1	28.0	37.1
1980s	33.6	29.1	29.0	27.9	33.1	35.3	39.3	24.8	34.7	-	38.9	32.6	22.9
1990s	33.3	29.9	35.9	31.4	31.7	36.6	34.2	26.3	35.9	35.0	37.7	33.4	11.4
Downward mobility													
1970s	12.4	17.9	-	18.4	17.9	19.0	-	18.8	26.2	23.5	14.5	18.7	17.3
1980s	12.2	16.8	11.8	14.7	17.7	19.4	15.9	18.0	21.1	-	15.2	16.3	8.7
1990s	13.0	16.4	10.4	14.1	19.0	18.6	17.9	19.6	17.8	15.4	16.3	16.2	8.0
Source: Breen 2004													

mobility rate are represented.

The data is divided into overall absolute mobility and vertical mobility, which in turn is divided into upward and downward mobility. The overall degree of mobility increased over decades in a similar way for each country. Significant increases are present in Ireland and Poland that were traditionally agricultural economies. There has been a decline of mobility in Hungary and in Germany, Great Britain and the Netherlands. In the 1990s the Italian absolute mobility was higher than the European mean, that is, it was closer to that of Sweden and considerably larger than that of Germany, France and Great Britain. Italian total mobility passed from 69.5 in 1980s to 72.1 in 1990s. The movement across occupational classes has increased by 7 points, due to changes in the distribution of the occupational class of destination. Through time, the variance of mobility among countries decreased. In fact, in the 70s the variance was 48% and in the 90s it was 20%. "On average, two-thirds of men occupy a class other than that in which they originated, and over the last part of the twentieth century the variance between countries in this figure has become quite small" (Breen 2004: 50). It has been represented using table 1.2 that the principal cause of this convergence has been due to a general decline in the farming sector and in the unskilled manual class. While at the same time there has been an extension of the medium and high classes. As a consequence there has been a prevalence of upward mobility over downward mobility. All these elements contribute to reduce the divergence between countries. Nonetheless some differences remain. As mentioned, Germany and Britain experienced the lowest absolute mobility, whilst Italy can be grouped with the countries that account for highest absolute mobility rate.

With regard to vertical mobility in Italy, it has increased by almost 6 points passing from 40.8 to 46.3. Regardless this percentage, which is equal to that of Germany and France, is the lowest percentage after Poland, in comparison with other countries. Indeed the overall mean is 49.7%. As far as vertical mobility is concerned, it can be divided in upward or downward mobility. As explained in section 1.2 vertical mobility is a movement from one socio economic position to a higher one (upward mobility) or a lower one (downward mobility). In the analysed societies there has been an overall upgrade of the occupational structure. As a matter of fact in each country, included in Italy, there has been a major increase in upward mobility than in downward mobility, with the only exception of Great Britain which is the sole country that experienced an increase in downward mobility and a decrease in upward mobility, even if slight.

These observed mobility flows "owe much more to differences (between countries or time points) in the marginal distribution of origins and destinations than to differences in social fluidity (...). If the interest is in inequality of opportunity, fluidity is, the proper thing on which to focus. This is because fluidity is an inherently comparative measure, assessing the advantages of different groups relative to one another "(Breen and Jonsson, 2005: 237). Relative mobility requires further attention in observing the mobility flows. It assesses if the "chances of being found in one destination class rather than another are the same for everybody regardless of social origins, means that family background does not intervene and so there is perfect mobility" (Breen, 2004: 4). Contrarily, if an occupational class is composed entirely by children whose parents are part of that occupational class, the society is highly stratified and closed. Leaving no room for social fluidity, "It is an empirical fact that perfect mobility is never observed"(Breen, 2004: 4) yet there are societies that display higher or lower levels of intergenerational social mobility; "the pattern of relative social mobility depend on the extent to which social inheritance counts in determining the social position arrived at by individual" (Schizzerotto and Marzardo, 2008: 6)

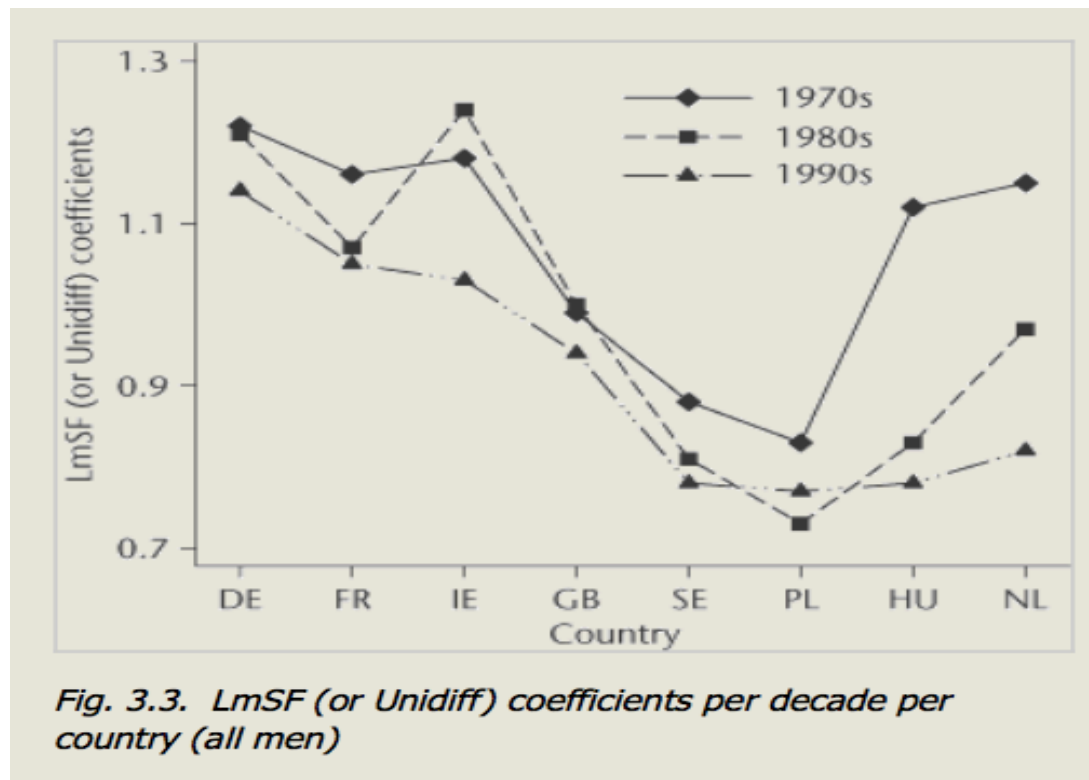
The analysis of Breen is the most recent cross-country comparison in the field. Breen analyses through log-linear and log-multiplicative models the trend and the degree in social fluidity within countries and subsequently makes comparisons between those countries to show which of them can be defined more or less open. Differently from absolute mobility rate where convergence among countries was found, for what regards relative mobility there has been differences between countries. The FHJ hypothesis has been rejected because the data did not fit the common fluidity model elaborated by the authors. However the deviations from commonality may not be so large.

In the three decades analysed, Britain did not demonstrate an increase in social fluidity. Similar is the case of Germany, however regardless of miniscule changes existing, these are not statistically significant. Since Britain was the only country representing no variation over time, it has been taken as a reference point with the value of 1. As a consequence, the values lower than 1 represent high levels of social fluidity and low levels of socio economic inheritance. Contrary, values higher than 1 represent wide levels of immobility in the society.

Differently from Germany and Great Britain, an increase in social fluidity in France, the Netherlands and Sweden, has been observed. The picture of Poland, Hungary and

Ireland is less clear however. In Hungary there have been changes, but these have not been linear, indeed observing the data there displays an increase in social fluidity in the 70s and 80s but a decrease of it in the 90s. Also in Ireland the changes have not been linear (however the data suggests that the trend is toward more fluidity). Poland seemingly represents an increase in relative mobility yet if data obtained in 1972 (that account for the largest increase in polish social fluidity) is removed, Poland would fit in the constant fluidity model (meaning no changes occurred). Similarly for Hungary, regarding data from 1973, those showing increase in social fluidity, if excluded the trend is in the opposite direction. For these reasons the picture for these countries is less clear.

Figure1.4

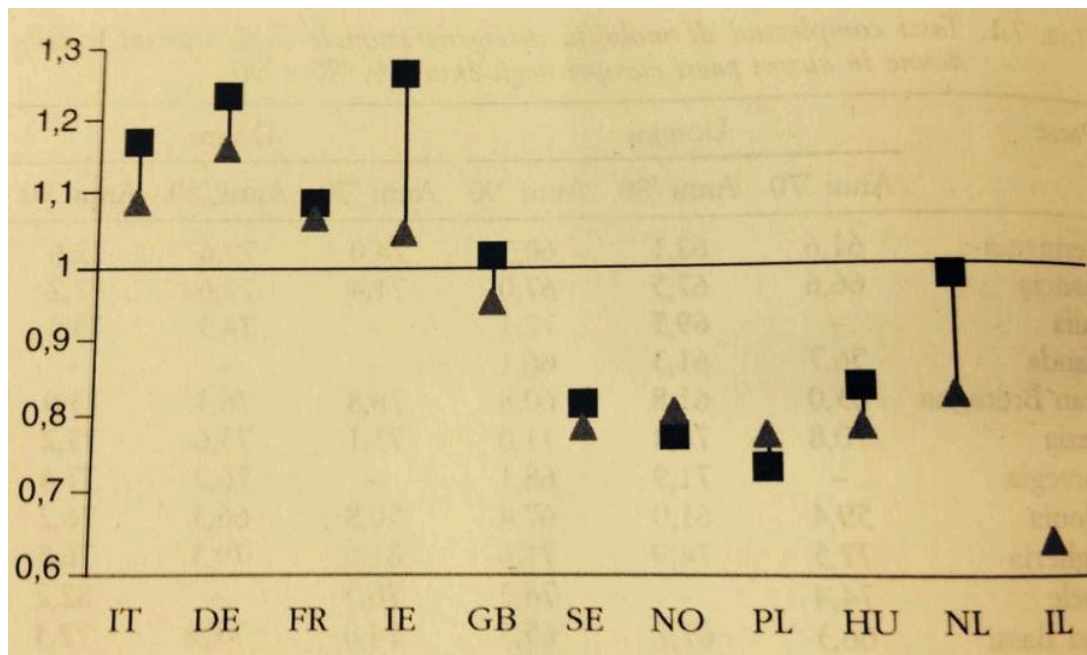


Source: Breen 2004

The line linking the point shows the social fluidity trend in the last 3 decades. The line representing the 1970s is above because there were higher levels of immobility, then there were in the 1980s' line and furthermore in the 1990s (less so for Ireland). The societies in which the parameter β (that represents the level of association between origins and destinations) has decreased most in Hungary, Netherland, France, Poland,

Sweden (for the above mentioned reason there is much more certainty about increased fluidity in France, Sweden and Netherlands). The changes were more consistent between 1970 and 1980 than between 1980 and 1990. Only in the Netherlands there has been a greater change in the last interval. The comparison has also been expanded to Italy, Norway and Israel. When these countries are added in the analysis it is discovered that the β value for Israel is 0.64 meaning that there are high levels of social fluidity. On the contrary, for Italy the values are 1.15 in 1980s and 1.07 in 1990s which lead to classify Italy at the lower end of the range with France, Germany, Great Britain and Ireland. A graphical representation of these findings is represented in image 1.2 that is divided in the decades of 1980s and 1990s.

Figure 1.5



Source: Schizzerotto and Marzadro 2013

n1980s ■ 1990s ▲

In a ranking of countries according to the degree of openness, as according to the analysis of Breen in the 1970s, the rigid pole representing the countries with the lowest level of fluidity were: Germany, France, Italy, Ireland, Hungary and the Netherlands. The countries with the highest level of social mobility in the 1970s were Britain, Sweden, Norway, Poland and Israel. Social fluidity has increased in France, Sweden and the Netherlands and possibly also in Ireland, Hungary and Poland. Britain, from

being one of the most open passed to be one of the least open countries due to the fact of little improvement to relative mobility among occupational classes. The 1990s as shown by the reported image elaborated by Schizzerotto and Marzadro using the data elaborated by Breen from Ireland, France, Italy and Germany remaining to be the most closed countries with the strongest association between class origins and class destination. Scandinavian countries (especially Sweden and Norway) along with Poland and Hungary tend to be among the most opened with Netherlands that has also become more open in the last decade and Israel that is more open than any other country.

It is not an exception to find a division between mobile Northern countries and immobile Anglo-Saxon and Southern European countries. Usually Southern European and Anglo Saxon countries are associated with a higher degree of immobility. The working paper of Causa and Johansson (2009) a research carried out within the framework of the economic department of the OECD; it has been responsible for assessing the recent patterns in intergenerational social mobility across OECD countries. They affirmed that to have a complete picture of the degree of intergenerational social mobility in a society, it is necessary to take into account more indicators. "However, one pattern that emerges is of a group of countries, e.g. southern European countries, which appears to rank as relatively immobile on most indicators, while another group, e.g. Nordics, is found to be more mobile" (Causa and Johansson, 2009:22).

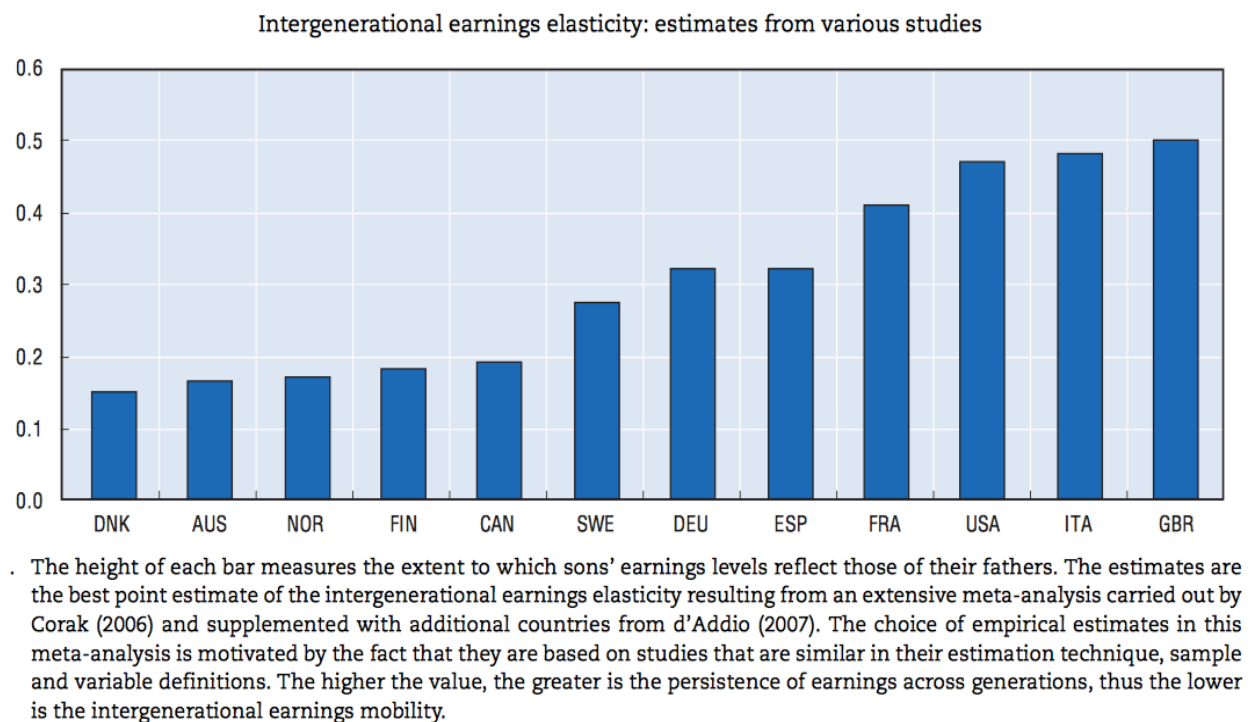
Section 1.3 describes the connection between indicators and often occupation is used to make analysis related to income mobility. Also with regard to intergenerational income mobility Italy is ranked among the least fluid countries. Several authors have carried out studies over income mobility. Low level of intergenerational income mobility in comparison with other nations has been studied by Mocetti 2007; Piraino 2007; Comi 2004. Low level of mobility and fluidity in Italy are also confirmed by Checchi et al. (1999); Pisati and Schizzerotto (1999) among others. A detailed analysis of this topic will be carried out in the last chapter.

Raitano and Vona (2011) elaborated a document "*Measuring link between intergenerational occupational mobility and earning: Evidence from eight European Countries*". They used the European Union Survey on Income and Living Conditions 2005 to investigate the role played by the family background on future children attainments on work and income. "In immobile countries, we find that significant

residual correlations are mainly driven by penalisation of upward mobility in the UK and by an insurance against downward mobility in Spain and Italy (...). Residual background correlations are not significant in Finland, Denmark, Germany and France, whereas they appear large in the UK, Ireland, Spain and Italy" (Raitano and Vona, 2011: 1).

One of the most recent analysis from OECD related to intergenerational social mobility is found in the publication *Economic Policy Reforms: Going for Growth 2010*. It includes an assessment of the cross-country pattern in intergenerational social mobility. For what concerns earning mobility across generations, it is found that "mobility in earnings across pairs of fathers and sons is particularly low in France, Italy, the United Kingdom and the United States, while mobility is higher in the Nordic countries, Australia and Canada." (D'Addio 2010: 189)

Figure 1.6



Although the researches can differ in their findings and there can be differences in the data and methods utilized, there seem to be few doubts that Italy is ranked among the least fluid societies.

To summarize, through decades there seems to exist a gradual convergence among the occupational structures of the western industrialized countries and the "intergenerational

flows of men between class, are becoming more similar" (Breen, 2004: 50) however this convergence has imperfections. Important differences in the countries' occupational structure are still present. Some important common trends can be explained by the increase in the service class and the overall decline of the farming sector, especially in those countries that were still characterized by the agriculture as important sector of the economy. However these movements across classes are due to different distributions of the occupational positions making up the system. These flows do not say anything about the fluidity of the system, thus it does not mention on the possibility of being found in one destination class rather than another regardless of social origins. In fact, with regard to relative mobility there is no convergence between countries. On this issue Breen's investigation contradict the Erikson and Goldthorpe picture of cross-national constancy in social fluidity. In the next section the Italian pattern of social mobility is analysed in detail to obtain trends in absolute and relative mobility.

1.5 Patterns of absolute and relative mobility in Italy

In the Breen's analysis and other investigations, Italy stands out being a country with high levels of absolute mobility yet with low levels of relative mobility or social fluidity among classes. In Italy, the Italian Households Longitudinal Study (Ilfi) has been recently carried out, it is an important prospective panel survey that begun in 1997 and carried out for five biennials waves. One of its specific aims was to gather data connected to intergenerational social mobility. The data have been largely used to assess the Italian social mobility pattern. Among the most important and recent works there are those of Schizzerotto and Marzardo (2008; 2013). Similarly to other analysis they separate their consideration on absolute and relative mobility. To investigate the historical trends they use, instead of years, the cohort of birth.

The study on Italian social mobility has found high rates of absolute mobility, thus important movements across occupational classes due to transformation in the occupational structure. Italian society passed from an agricultural economy to an industrial economy. As a consequence there has been an important and rapid upgrading of the occupational structure, "such that a man would be expected to obtain an occupation about one-third of an ISEI [International Socio-Economic Index of

occupational status] point higher if he entered the labour force one year later” (Ganzeboom and Trainman, 1993: 14).

Schizzerotto and Marzardo (2011) considered 4 cohorts of birth: 1922-1937; 1938-1953; 1954 - 1969; 1970-1985. The aim was to investigate the historical trend of social mobility. The mobility table 1.7 reports their findings. The occupational classes are classified according to the European socio-economic classification.

I – Entrepreneurs (more than 15 employees)	Professionals and managers
II - Routine non-manual employees, higher and middle grades	Higher grade white collar
III - Self-employed occupations (with 0-14 employees)	Petit bourgeoisie
IV - Lower supervisory and lower technician occupations	Higher grade blue collar
V - Lower services, sales and clerical occupations	Lower grade white collar workers
VI - Lower technical occupations	Skilled workers
VI - Routine occupations	Semi and non- skilled workers

The mobility tables are used to show the section of the population that arrive in a class different from that of their origin. It is useful to investigate if individual experienced mobility by arriving in a class different from the one to which they belong; or if there are high levels of association between father-son occupational positions. The rows refer to the class of origins. It is the father's occupational class when the respondent was fourteen years old. The columns represent the class of destination hence the occupational class of the respondent. If the class of origin is i and the class of destination is j the frequency of each cell expresses the number of individuals descending from class i who reached class j .

Table 1.7 Association father-son occupational positions

Birth cohort -1922-1937									
	Destination								
Origin	I	II	III	IV	V	VI	VII	Total	N
I	39,0	23,2	8,5	0,0	8,5	9,8	11,0	5,8	82
II	34,1	25,0	6,8	2,3	6,8	15,9	9,1	3,1	44
III	5,4	8,7	13,9	0,6	6,6	20,9	43,8	44,7	632
IV	6,1	18,2	3,0	6,1	12,1	18,2	36,4	2,3	33
V	14,6	18,8	2,1	0,0	20,8	27,1	16,7	3,4	48
VI	3,4	4,6	6,3	1,7	7,4	31,4	45,1	12,4	175
VII	2,3	5,0	4,0	0,8	5,5	17,0	65,5	28,3	400
Total	7,4	9,1	9,0	0,9	7,1	20,4	46,0	100,0	1.414
N	105	128	127	13	101	289	651	1.414	

Birth cohort -1938-1953									
	Destination								
Origin	I	II	III	IV	V	VI	VII	Total	N
I	40,2	33,9	1,7	1,1	9,2	9,8	11,0	7,7	174
II	37,0	33,1	3,1	0,0	15,7	15,9	9,1	5,6	127
III	9,7	16,6	9,5	0,8	10,8	20,9	43,8	37,2	844
IV	19,1	31,9	2,1	4,3	17,0	18,2	36,4	2,1	47
V	15,8	23,7	1,8	1,8	16,7	27,1	16,7	5,0	114
VI	5,5	13,2	2,9	0,3	11,6	31,4	32,6	13,7	310
VII	3,4	11,8	4,8	2,3	12,1	17,0	42,1	28,7	651
Total	11,7	17,7	5,7	1,3	11,9	20,4	31,0	100,0	2.267
N	265	401	130	29	269	289	702	2.267	

Birth cohort - 1954-1969									
	Destination								
Origin	I	II	III	IV	V	VI	VII	Total	N
I	41,7	23,5	9,3	2,6	10,6	2,6	9,6	11,3	302
II	33,1	32,7	5,7	0,8	14,7	4,1	9,0	9,2	245
III	13,4	17,4	9,4	0,5	16,1	18,0	25,2	30,3	812
IV	22,6	26,4	9,4	5,7	11,3	11,3	13,2	2,0	53
V	19,9	20,5	5,3	0,0	16,6	15,9	21,9	5,6	151
VI	7,4	16,5	3,2	1,2	15,0	26,5	30,1	12,7	339
VII	8,1	13,0	4,3	1,3	13,6	21,8	37,9	28,9	774
Total	16,7	18,5	6,5	1,2	14,4	16,9	25,8	100	2.676
N	446	494	175	31	386	453	691	2.676	

Birth cohort - 1970-1985									
	Destination								
Origin	I	II	III	IV	V	VI	VII	In total	N
I	28,6	22,2	6,4	1,5	16,5	9,8	15,0	16,3	266
II	19,4	23,7	5,6	1,7	26,7	9,5	13,4	14,3	232
III	9,7	15,8	10,5	2,0	15,1	21,2	25,8	24,1	392
IV	30,3	12,1	6,1	3,0	9,1	15,2	24,2	2,0	33
V	22,0	17,0	3,5	2,1	20,6	14,9	19,9	8,7	141
VI	9,9	10,3	3,7	0,4	16,9	24,3	34,6	14,9	243
VII	4,1	10,9	3,1	1,3	20,3	21,3	39,1	19,7	320
In total	14,6	16,2	6,0	1,5	18,6	17,5	25,6	100,0	1.627
N	237	264	97	25	303	284	417	1.627	
Source: Schizzerotto and Marzardo 2011									

It is evident the already mentioned massive upgrading of the occupational structure in Italy. That transformation initiated after the Second World War. In Italy there have been high levels of absolute mobility. It passed from being an agricultural economy to an industrialized and post industrialized economy and this has had an impact on its occupational structure. Italy, as already shown in the Breen's investigation, experienced important levels of vertical mobility and most vertical mobility was upward mobility. There has been a high rate of the populations that has moved from lower occupational class to higher occupational classes. It is increased the proportion of individuals from working or agricultural classes origins that arrived in the highest occupational positions as the service class and routine non-manual class. There has been a decline of the agricultural sector and many children whose fathers were in farmer occupational class experienced upward mobility. There have been an expansion of the higher and middle class and a retrenchment of the lower classes. Class I and Class II have expanded agricultural classes and the unskilled working class have shrunk. "This sing of changes are usually interpreted as signs of the transition from an industrial to a post-industrial economy." (Pisati and Schizzerotto 2004: 168)

According to Ganzeboom and Treiman (1993) there is some evidence that "the process of status attainment in industrialized countries is relatively more achievement-based and less ascription-based than in non-industrialized countries (...). It is clear that in the course of the 20th century the process of occupational attainment in Italy has become increasingly more dependent on achievement (educational attainment) and increasingly less dependent on social origins (father's occupational status)" (Ganzeboom and Treiman 1993: 17). However they recognize that the major movements have been due to the passage from an agricultural economy to an industrial economy. They replicate their analysis for the non-farm population. The reduction of a father's occupation influence on future children's attainments is predominantly due to shift of the labour force out of the agriculture.

Due to these transformations, the upgrading of the Italian occupational structure has been faster among the first cohort rather than the fourth. In fact the number of young that arrived in the professional class increase in first, in the second and in the third cohort but it decreases for the youngest cohort. It has reduced the number of descendants of white collars reaching class I; and the number of children of higher grade blue collar arriving in white collar. A similar trend is observable for the routine

non-manual class. Indeed it is possible to identify a slight decrease in upward mobility rate and an increase in downward mobility for the cohort of birth 1970-1985. As a consequence there is a reduction in the number of individuals that start from higher social position and an increase in the number of individuals that start from lower classes origins. Therefore recent levels of mobility are not anymore due to improvement in class destination of children from disadvantaged class origins. It is due to downward mobility of children from medium and high occupational class of origins. The proportion of the children of entrepreneur, manager, professional that follow in their father's footsteps was very high and stable in the first three cohorts, but it is reduced in the last cohort. The same apply for the trends of routine non-manual occupational classes. At the same time, these fluxes are not compensating by upward mobility by the low or medium social classes. On the contrary, in the youngest generations this mobility is lower than in the other three cohorts.

Apart from these considerations, overall "almost three quarters of Italians born between 1900 and 1987 experienced a mobility event by arriving in a class different from the one to which they belonged when they were fourteen years old" (Schizzerotto and Marzardo 2008: 5). Nonetheless, looking at the mobility table 1.7 it is possible to note that the main diagonal cells bear the greatest counts. If in the mobility table the diagonal cells will display large frequencies this means that there is high propensity for individuals to follow in their father's footsteps. Immobility is higher among children from the most privileged occupational class I, II, III.

To investigate if Italian society has a more open or rigid stratification system that influences the opportunity of arriving in a class different from that of their origin, it is necessary to focus on the relative mobility of this country. Indeed it seems that although these structural changes individuals from different social origins are differently able to exploit the opportunities lead by such transformations. Relative mobility "concerns the association between classes of origin and class of arrival net of the effects (on the frequencies of individual cells) of their respective marginal distributions." (Schizzerotto and Marzardo, 2008: 9). Through log-lineal models and the odds ratio, are measured the advantages or disadvantages of arriving in a determinate class position related to the class of origins. The odds ratio helps to evaluate the degree of fluidity and openness of the social stratification. Relative mobility expresses the inequalities between the

descendants from two different classes of origin (i and i*) in their chances of being found in one class of destination (j) rather than another (j*).

In Schizzerotto and Marzardo (2008) investigation the constant association model explains 94% of the observed OD association. Substantively, its "parameters indicate that today, as in the past, the class positions arrived in by Italians are strongly conditioned by their classes of origin." (Schizzerotto and Marzardo, 2008: 20). However it does not fit all tables' counts and this means that there have been some changes. Indeed the overall degree of association between origin and destination has slightly been reduced.

Through the Origin-Destination association model in the uniform difference model they presented 5 odds ratio. To classify the occupations they used a slightly adapted version of the Erikson and Goldthorpe 1992 class scheme.

I-II	Entrepreneurs (more than 4 employees), managers and professionals
IIIa	Routine non-manual employees, higher and middle grades;
IVab	Self-employed (with 0-3 employees) not in agriculture
IVc	Self employed (with 0-3 employees) in agriculture
V-VI	Foremen and skilled manual workers
IIIb+VIIa	Unskilled non-manual and manual workers not in agriculture
VIIb	Unskilled manual workers in agriculture

Figure 1.8

**VARIATIONS ACROSS BIRTH COHORTS OF INEQUALITY
IN MOBILITY CHANCES. SELECTED ODDS RATIOS^a BASED
ON THE PARAMETERS EXPRESSING THE $\Phi_k^C \Psi_{ij}^{OD}$ INTERACTIONS
OF THE UNIFORM DIFFERENCE MODEL. ITALY 2005**

Couples of origins and destinations	Birth cohort		
	1900-1937	1938-1957	1958-1987
$\Omega_{I-II(I-II/IIIa),IIIa(I-II/IIIa)}$	1.77	1.66	1.48
$\Omega_{I-II(I-II/IVab),IVab(I-II/IVab)}$	6.49	5.28	3.63
$\Omega_{I-II(I-II/IIIb+VIIa),IIIb+VIIa(I-II/IIIb+VIIa)}$	33.78	22.60	11.40
$\Omega_{IVab(IVab/IIIb+VIIa),IIIb+VIIa(IVab/IIIb+VIIa)}$	4.31	3.67	2.74
$\Omega_{IIIa(IIIa/IIIb+VIIa),IIIb+VIIa(IIIa/IIIb+VIIa)}$	4.26	3.63	2.72

Source: Schizzerotto and Marzardo (2008). Ifli, waves 1997, 1999, 2001, 2003 and 2005.

Looking at the table 1.8 the most marked reduction in inequalities is the reduction in the disparities between the descendants of the *service class* (I-II) and those of *unskilled non-manual and manual workers* (IIIb - VIIa) in the chances of arriving in a *service class* rather than arriving in unskilled workers. It passed from 34 to 11. However the difference in chances between the two classes remains very high. There are very low levels of mobility between the service class and the manual workers. In another work, Pisati and Schizzerotto (2004) studied the Italian social mobility regime between 1985 and 1997. The data were drawn from the Indagine Nazionale sulla Mobilità Sociale (National Survey on Social Mobility) and from the first wave of the Indagine Longitudinale sulle Famiglie Italiane (Italian Household Longitudinal Survey). They found that the absolute mobility regime remains quite stable in the last period and that there has been a slight increase in the rate of relative mobility. They point out that "the strength of the barriers separating the urban manual and non-manual classes has increased somewhat" (Pisati and Schizzerotto, 2004: 151) and these barriers hinder the intergenerational movements between these two groups of classes. They have found that the movement between skilled manual workers and service class and routine non-manual class has become more difficult in 1997 than in 1985. However this immobility in the exchange between these classes has been counterbalanced by other changes. Therefore rates of relative mobility have turned to be increased. An important reduction, even weaker than the one just mentioned, is decrease in disparities between descendant *white collar* (III) and those of *unskilled employees* (IIIb VIIa) in their chance of arriving in a white collar position from 4.26 to 2.74. There are also increased level of mobility also by service class to unskilled employees. There has been a decrease in the inequalities between children of the *self employed* (IVab) and those of the *unskilled working class* (IIIb and VIIa) in their chances of arriving in self-employment from 4.31 to 2.72. A sizeable reduction has occurred in the disparities between descendent of *service class* (I II) and those of the *self-employment* (IIVab) origins in the chances of arriving in *entrepreneurial, managerial and professional occupations* from 6 to 3. Far less pronounced is the decrease of the already few disparities between descendants of *service class* and those of *white collars* in arriving at *service class* 1.77 a 1.48.

Generally the strength of net association has reduced from the older to the younger cohort. This means that over the twentieth century the weight of social inheritance in Italy reduced, on average, by about one third (Schizzerotto and Marzardo, 2008). However the increase in social fluidity should not be overrated. Indeed high levels of advantages for some classes in reaching or staying in a specific occupational class are high. It is evident from the table 1.8 as there exists important differences between descendants from the service class and those from unskilled manual and non-manual workers in the chances of reaching the service class. Indeed the descendants from the service class have chances of following in their fathers' footsteps more than 11 times greater. Italy is still far from being a meritocratic society because social origins still exert a strong influence on individual occupational destinations (Schizzerotto and Marzardo, 2008: 24)

In another work of Schizzerotto and Marzardo (2011) an additional odds ratio for pair of class origins and class destination is presented:

I-II	Entrepreneurs (more than 4 employees), managers and professionals
IIIa	Routine non-manual employees, higher and middle grades
IVab	Self-employed (with 0-3 employees) not in agriculture
IVc	Self employed (with 0-3 employees) in agriculture
V-VI	Foremen and skilled manual workers
IIIb+VIIa	Unskilled non-manual and manual workers not in agriculture
VIIb	Unskilled manual workers in agriculture

Figure 1.9 Odds ratio for pair of class origins and class destination is presented				
Chances descendants class I+II staying in the same class rather than III	1,9	1,3	1,6	1,4
Chances descendants class I+II staying in the same class rather than IVa	4,3	3,6	3,7	2,0
Chances descendants class I+II staying in the same class rather than V VI	4,3	5,3	7,9	4,6
Chances descendants class I+II staying in the same class rather than IIIb+Vab	1,9	3,4	4,8	2,7
Chances descendants class III in reaching class I+II rather than remaining in the same class	1,3	1,2	1,1	0,8
Chances descendants class III staying in the same class rather than descending in IVab	2,3	2,8	2,4	1,5
Chances descendants class III staying in the same class rather than descending in V+VI	2,3	4,3	5,0	3,3
Chances descendants class III staying in the same class rather than descending in IIIb+Vab	1,0	2,7	3,1	2,0
Chances descendants class IVab in reaching class I+II rather than stay in the same class	0,8	1,0	1,3	1,0
Chances descendants class IVab in reaching class III rather than stay in the same class	0,9	1,3	1,2	0,9
Chances descendants class V+VI in reaching class I +II rather than remain in the same origin class	0,1	0,2	0,4	0,3
Chances descendants class V+VI in reaching class III rather than remain in the same origin class	0,2	0,4	0,6	0,5
Chances descendants class IIIb+Vab in reaching class I +II rather than remain in the same origin class	0,8	1,0	1,3	1,0
Chances descendants class IIIb+Vab in reaching class III rather than remain in the same origin class	0,1	0,3	0,3	0,3
Source: Schizzerotto and Marzardo 2011				

Also through table 1.9 it is possible to identify a general improvement in general fluidity. However the chances of being found in one class position rather than another are still dependent on social origins. The chances that children of entrepreneurs, professional and manager or routine non-manual workers will remain in the same occupational position of the father rather than descending the skilled or unskilled manual workers class are quite high although they decrease over birth cohorts. Whatever the cohort, the children of entrepreneurs, managers and professionals or children of routine non-manual employees very seldom are observed among the ranks of manual workers whether skilled or unskilled. Similarly, the chances of discovering children of skilled or unskilled manual workers in the most privileged classes (entrepreneurs, professional and manager or routine non-manual workers) are quite few. To conclude in the light of their fitting values, the overall degree of social mobility has constantly increased between the beginning of the twentieth century and that of the twenty-first. There have been improvements in the process by which individuals are allocated in the various occupational classes but these improvements have been slow and faint. (Pisati and Schizzerotto, 2004). Moreover these improvements are not so large and include a small number of individuals. According to Schizzerotto and Marzardo there has been a modest shift toward "greater social fluidity in the allocation of individuals among the different occupational positions. Nevertheless, ascription still prevails over achievement" (Schizzerotto and Marzardo, 2008: 5).

The parents' socio economic positions still exert influence on children's future occupational attainments. In fact both the chances of arriving in the privileged classes and the risk of arriving in the disadvantaged one are strongly conditioned by the class of origins in all the studied cohorts (Schizzerotto and Marzardo, 2011). Therefore Italian society is still far from being a society with high levels of fluidity and hence social mobility. According to these authors it can be state that Italy was not in the past, and is not currently, a meritocratic society. As a consequence the factors and the mechanisms that underpin these low levels of social mobility are deeply rooted in Italian society. In the next chapter the focus is on the factors that promote and hamper mobility generally and what is their role in the Italian society.

Chapter 2

Factors that promote or hamper intergenerational mobility: main specificities in Italy

2.1 Introduction

The first chapter analysed the Italian occupational structure and its levels of social mobility from the beginning of the twentieth century to the twenty-first century. The differences between absolute and relative social mobility have also been highlighted. Italy has been compared to other developed nations and the results rank her among the least mobile societies. In this chapter, factors underpinning or hampering social mobility will be outlined. The factors influencing positively or negatively to the persistence of the socio economic status across generations will be discussed theoretically as well as for each factor, some empirical considerations on the Italian specific case will be made. In the literary works, many different causal processes at work are recognized. In this study a division in four categories is made, namely non-economic factors, institutional factors, economic factors and the interaction between economic and social factors. However each category within itself gathers a different process and occasionally it is not apparent to mark a neat line between the different factors since they interact with each other.

The first factors analysed are the non-economic factors that can be associated with the transmission of occupations across generations. These are the genetic factors and the socio cultural factors. Genetic inheritance of abilities and talents is important from a policy prospective because, differently from other factors, it cannot be politically addressed since it is not responsive to incentives. The socio-cultural factors include the way in which the parental background and the local community affect individual future achievements. Children are influenced by many variables, such as the households' structure; the education and occupation of parents; the neighbourhood where they grow

up and other processes that shape their development. It is documented that children coming from well-educated environments usually achieve higher level of education and perform better at school in comparison to children coming from lower cultural environments. This applies to Italy, where the importance of family and local environment for school achievements and performance is empirically documented.

Thereupon, the attention is turned to the institutional factors. Amongst such institutional factors in our discussion on social mobility, a fundamental role is played by formal education. Its role has been identified as crucial for the topic, by both sociologists and economists. It is the primary mechanism by which people acquire skills beyond those passed on by their family and through which they enhance their productivity. Depending on the amount and the kind of education pursued, individuals will attain a specific job and wage. Regardless of social origins, individuals should have a similar educational opportunity in order for the possibility to exist for anyone, with ability and motivation, to succeed. However it is analysed, such is the case in Italy that educational decisions strongly depend on family background. One reason is identified in the existence of early school tracking that occur at the age of 14. In this step the sociocultural and economic background play a decisive role affecting future opportunities. Italy displays high levels of intergenerational educational mobility, meaning that children tend to achieve similar level of education of those achieved by their parents. Similar educational pattern between parent and children increases the probability of going through a similar occupational career, thus it is likely that the son will have the same socio economic position of the father, without experiencing mobility.

Limitations to human capital accumulation are interpreted as one of the most important causes fostering socio-economic status correlation across generations. If limitations exist in human capital investment, education is unable to offset the role of social class in determining economic outcomes. Section 2.3 deals with economic factors underpinning social mobility. The role of liquidity constraints in education investments is taken into account as well as the importance of adequate return to human capital investments. Individuals invest in education because they expect to increase their employability and earnings. If such expectations are not satisfied there will be lower investments in education especially from low-income families that won't be willing to assume the risk. Despite Italy having a public educational system, low-income families are those

investing less in the education of their children. Above all, if the school quality on the territory is not homogenous to high-income parents, differently from low-income parents, who can afford to pay a higher rent to live in neighbourhoods where those schools are located and/or bear transport costs. Moreover, if direct monetary costs of education can be reduced thanks to State intervention, the indirect costs of education are borne by the family. It corresponds to the forgone income, the fraction of income that has not been earned due to school attendance. Family with limited economic resources may prefer children's economic contribution as soon as possible, disincentivating the continuation of studies or tracking them into swift, or more vocationally oriented, educational lines. Similar decisions depend also on the return in the labour market. Italy is characterized by inadequate return to human capital investments and this can be identified as an important reason as to why low-income parents invest less in education. Much research has emphasized that in Italy, education is correlated with occupation yet it only moderately mediates the overall influence of social origins, signifying a parity of schooling level. Family background can enter into play as well for the labour market. Returns to education are significantly differentiated by family background. The probability of acceding to a determinate socioeconomic position varies according to the family background.

In the final section, the interaction among economic and social factors will be examined. The attention is turned on the role recovered by the family and the local community, in influencing the individuals' entrance to the labour-market. A number of empirical studies demonstrate the use of an individuals' social network in lowering barriers to enter in the labour market. Beyond formal methods the use of informal methods searching employment is rather widespread. Despite the use of informal methods appearing to be economical and timesaving for searching for employment, it can interfere with a genuine process of selection. It can give rise to favouritism practise, in which consideration beyond individual productivity enters into account. Socially connected people or relatives can be favoured in place of more talented workers. This can lead to a mismatch among individuals' productivity and job-positions. This, in turn, would negatively affect returns on educational investments, since factors differentiate from abilities, merits, efforts or educational achievements enter into play in the recruitment process. The section concludes with some consideration on the use of informal methods in different occupational sectors of the Italian society. Italy shows to

be a society with strong family ties and in which there exists important levels of reliance on family as an economic unit. According to different studies favouritism practice are widespread in both private and public sectors. In the section, the existence of "hereditary clause" in the Italian's labour market regulations is also underlined. A clause exists that permits the transmission of job from father to son, giving priority, or reserving a portion of the vacancies to employees' children in the hiring process through which is legally permitted.

This chapter is organized as follows. Section 2.2 presents non-economic factors. Section 2.3 focuses on institutional factors. Section 2.4 discusses economic factors. Section 2.5 investigates the interactions between social and economic factors.

2.2 Non-economic factors

In this section the most important non-economic factors that can be associated with the transmission of occupations across generations are investigated. These are the genetic factors and the socio cultural factors, thus the influence of parental background and the local community in children educational and occupational attainments.

The genetic transmission from parents to son of cognitive skills, abilities and talents is identified as one possible reason explaining intergenerational transmission of occupational positions. Genetic attributes are passed on to child in a way not determined by parental control, thus it is something not responsive to incentives. The distinction "between genetic transmissions and other sources of intergenerational linkages can be important from a policy perspective" (Emran and Shilpi, 2011: 2). Indeed on these factors, it is not possible to intervene; they cannot be politically addressed differently from other factors.

The role of genetic endowment in the transmission of occupational positions across generations has been considered by economists and sociologists; however its relevance is still a controversial issue. The crucial point is that the transmission of these inherited traits is something considerably complex to identify, since they are imperfectly observable, hence "each person can only try to make some about it from the family history" (Checchi et al., 1999: 368). Indeed literature on intergenerational mobility "has been fraught with econometric challenges that arise from the unobservability of the

genetic characteristics" (Emran and Shilpi, 2011: 2). Some researchers have tried to purge the father-son relationship from genetic effects. They have sought to distinguish the impact of "nature" versus "nurture" on future attainments. Holmlund et al. (2008) related the differences in education of same-sexed twins and differences in education between their children. Björklund et al. (2005) studied the relationship between adoptive parents' income and the outcome for their adopted children in Sweden.

On the whole, the correlation among father and son occupational position, based on genetic transmission of ability, is based on "shaky evidence" (Checchi, 1997: 336) and the empirical evidence obtained indicates "that the relative contribution from genetics to intertemporal persistence is low" (Checchi, 2006: 215). The relevance of genetic transmission opposed to cultural transmission of abilities, skills and talents has always been a controversial issue. Hernest and Murray (1994, 410-413) through studies on adoption recognize that the childhood family's environments hold more importance than the genetic factor. Knoll et al. (2013), in a paper relative to intergenerational occupational mobility in Germany, determined the persistence in occupation for children who grew up with their biological fathers and those who did not. "The results suggest that nurture-related effects [not nature] explain a significant fraction of the observed correlation of fathers' and children's occupational choices" (Knoll et al. 2013: 1). Accordingly a crucial non-economic factor for social mobility is the sociocultural environment.

A large body of research has demonstrated that the sociocultural background plays a certainly crucial role in shaping an individual's features and development that in turn will affect his educational and occupational choices and attainments. The socio cultural environment assumes relevance both at family level and at the local community level. The wealth, the education, the occupation, the income, and other factors that characterize parents' background and the local community in which children are raised affect, in many ways, child development. A growing empirical literature pays specific attention to the impact of sociocultural background on a child's educational performance and achievements.

The family is one of the first and main agencies with which children have a "relation". It affects individual development in many ways. First of all, the cultural environment in which children are raised in, as well as, the structure of the household can impact individual achievements. Numerous sources state that size, birth order, number and

gender of siblings may affect future children's outcomes (D'Addio, 2007; Feinstein et al., 2004; Grawe, 2005). Feinstein et al. (2004) analyse the intergenerational transmission of educational success that, according to them, is a key driver of persistence of social class differences. In their report, among the causes that can impact children educational attainments, they included analysis over family structures and sizes. They assert "children's educational attainments can be affected by factors such as the number of siblings, the structure of the family or the age of parents at first birth" (Feinstein et al. 2004: 62). As far as the structure of the family is concerned, the majority of the studies point out that for child development it is important to have stability in the family. "Unstable relations, perhaps characterised by intra-household violence, conflict or periods of parental absence, can affect proximal processes in the home impacting on children's behaviour at school and on the likelihood of gaining school qualifications" (Feinstein et al. 2004:) Furthermore the presence of both parents in the family increases the quantity of parental investment in children's development. Feinstein et al. (2004) demonstrates how different empirical evidences have shown that children who experience the breakdown of their parents' relationship, i.e. living in one parent household due to divorce or separation, differ from those who do not; in terms of their behaviour at school and completion of school years. The existence of a step-parent can have both positive and negative consequences for child development (Cooksey, 1997). Among the negative effects, there are low educational qualifications. Another dimension studied in the report is the family size so the total number of children and the birth order. Becker and Tomas (1976) point out that greater is the size of the family, lower is the future educational attainments since every additional child receives relatively fewer parental resources. If the resources are bound to the number of siblings, therefore the education is negative, due to the fact that a greater number of children in the family attain lower resources per capita and hence greater is the cost of school attendance. However, as highlighted by Checchi, the effects can be negative as well as positive due to supportive effects. Indeed, the greater the number of siblings, higher is the possibility that someone has already attended school, therefore greater is the chance of receiving assistance at home. Yet Feinstein et al. (2004) declares that "in most studies the effects of family size on children's educational attainment remains significant and fairly stable. This is, on average, children raised in small families achieve higher educational qualifications than children raised in large families" (:66). Moreover it is

apparent that first-born children achieve higher educational qualification. According to an OECD's (2008) study, the correlation to parental earnings is higher for first-born children than for later-born siblings (OECD, 2008:207).

Esping and Andersen (2006a) highlight the importance of parental time investments, signifying the time dedicated by parents to their children. He explains that on one side, children at the bottom end of the social pyramid should be advantaged since labour supply among less educated mothers tends to be lower. However, parental time investments depend on other three factors. First, on sibling size and usually low educated women have more children. Second, there are differences in the quality of parent child interaction and in the quality of external care. Beyond household structure, the cultural environment in which children are raised in is crucial.

The existence of a "cultural environment, in which children are raised and which differ from family to family must be recognized" (Checchi, 1997: 337). Many authors point out that children from uneducated and low-income families compared to more affluent and well-educated families turn out to be disadvantaged in many aspects. On average, children coming from disadvantaged families have lower birth weight, higher risk of infant mortality, more behavioural problems, are academically less successful, perform inferiorly in the labour market, and have inferior health. The impact that family background may have on a child's educational attainment is crucial. The next section will deeply investigate the role of education as a main channel to foster mobility. Raitano (2009) using EU-SILC 2005 micro data and an ordered probit model, analyses the influence of family background on education attainments in 15 European countries. The background is synthesised by four variables: family composition; if an individual lived with both parents whilst being young; parents' educational attainment; parents' occupation. He demonstrated that "the probability of attaining a higher result is positively related to a better background" (Raitano, 2009: 339)

The organization for Economic Co-operation and Development (OECD) launched the Programme for International Student Assessment (PISA) that monitors the outcomes of "education system in terms of student achievement on a regular basis and within an internationally accepted common framework"(OECD, 2003:4). PISA assessed the variance in student performance and the *home background* was identified as "one of the most powerful factors influencing performance" (OECD, 2003:165).

Well-educated parents and a high cultural environment exert positive effect over individuals' school performance and attendance. Bowles and Gintis (2002) highlight that children from well-off parents receive improved instructions due to "cultural inheritance" also. It seems that children from "well-educated families acquire at home the cultural capital that enables them to perform well in school" (Ganzeboom and Treiman, 2007: 5). PISA 2003 demonstrated the importance of parental involvement and support in children's academic success.

According to Desforges and Abouchaar (2003) the extent and the form of parental involvement is influenced by social class, parental level of education, "material deprivation, maternal psycho-social health and single parent status and, to a lesser degree, by family ethnicity." Harris et al. (1999) explains that as more educated parents create a cognitively stimulating home learning environment, "mothers with more formal education in comparison to mothers with less formal education provide more structure, verbal guidance, and elaboration when teaching their children a problem-solving task" (Harris et al. 1999: 490). The ability of parents in supporting their children's learning process and the parental level of education seem to be hold relative importance in contributing to the quality of this stimulus.

D'Addio (2007) explains that parental education influences the children's demand for cultural goods and services. Indeed, beside parental income, the education of parents affect the share of resources devoted to goods and activities that favours children development such as children health care, housing, nutrition, adequate conditions for study, books, cultural visits, computers and so on. Well educated parents in comparison to less educated parents are likely to better organize and allocate their time and resources in "developmental" type activities with their children and discourage behaviours that may have a negative impact on children development. The relevance of "cultural constrains" instead of "liquidity constraints" in educational decisions will be elucidated further in the next section. Positive parental involvement include good parenting in the home, intellectual stimulation, good models of constructive social and educational values and high aspiration relating to personal fulfilment. A supportive family can better assist children with homework, academic obstacles and so on.

Another important point is that a well-educated family may highly value education and hence may give to their children incentive for studying. Moreover, families living in a positive cultural environment convey the impression to be advantaged in evaluating the

quality of educational services and, as a result, an educated parent seems to be "better aware of the psychological and economic value of education, and puts more pressure on his/her children to achieve more at school" (Checchi, 2006: 216). Furthermore, they are in possession of superior instruments for collecting information that affect "children's abilities through several channels besides formal education attainments e.g., selecting better schools" (Raitano and Vona, 2011:2). More educated parents are likely to provide more specific council and support, for example by indicating which the best schools are or training institutions. "Parents' choice of human capital investment for their children is affected by their own human capital" (Ioannides and Loury, 2004: 37). Low educated parents may have difficulties in supporting their children through the complexities of an education system, especially if they were early school leavers (Esping-Andersen, 2009). Much research has emphasized family background contributing to the cultural transmission and accumulation of cognitive skills and non-cognitive personal traits, called "soft skills". Soft skills are "elements shaping social and relational competence such as risk aversion, extroversion, the willingness to work in team, the sense of discipline or leadership (...)" (Franzini et al., 2013: 3). Macmillan (2013) considers the role of non-cognitive skills as a driver of intergenerational correlation of worklessness in the UK. In his descriptive analysis, he suggests that "non cognitive skills plays an important role in predicting future workless spells" (Macmillan, 2013:20). Indeed these skills are rewarded in the labour market and are not learnt from school. Macmillan (2013) assesses that extroversion, hyperactivity and conscientiousness reduce the chances of spending time out of work. He concludes that there would be "benefits to improving the soft skills of the most disadvantaged children to ensure a successful connection with the labour market in adulthood".

Many researches on intergenerational occupational mobility highlight the importance of the transmission, from parents to children, of values, personality traits, risks, attitude. Children's outcomes also depend on parenting styles, their values, beliefs, expectations and attitudes. Parents influence their children directly, since they choose the type of school to which they send them or the place where they want them to develop and affect their behaviour, encouraging particular activities and discouraging others. Feinstein et al. (2004) points out that "in general, research here has indicated that more positive perceptions on the part of parents are associated with higher attainment in children" (Feinstein et al., 2004:54) and that parent expectation and values directly influence

children performance and choices, not only in academic outcome but also in occupational aspirations. Eberharter (2012) studies the intergenerational transmission of occupational preferences that provides an explanation of persistence of gender differences in occupational choices.

Dardadoni et al. (2007) assert that the effect of parent's schooling on children's educational attainment may also "reflect parental pressure, and can be interpreted as a role effect" (Dardanoni et al. 2007 :18) They discovered that children respond strongly to family pressure and they point out that when "parents' pressure is weak only the social environment, school primarily, can make up for this loss by helping the young to appreciate the value of education." (Dardanoni et al. 2007 :18) The children with more educated parents appear to achieve higher educational qualification and this can be explained by social motivation. Parenting practices and parental behaviours may affect children's outcomes owing to social learning processes (Capaldi and Clark, 1998). Through these processes, children model their behaviours on those of their parents or on those of individuals whom they value. "Children learn from and are influenced most by those persons who are most meaningful to them" (Popenoe 1998:8). Indeed, D'Addio (2007) reveals that among the channels underpinning the transmission of ability there is the imitation of the children and the deliberate efforts of parents to shape the preferences and beliefs of their children. Also Topa (2001:2) suggests that individual choices are influenced by imitation, learning, social pressure and other non-market externalities.

Numerous literary works suggest that as occupation-specific human capital formation might also take place within the family, prevailing over official channels. Lentz and Laband (1989) in their research, display that the transfer of occupational-related human capital can be identified as one of the main causes leading to the intergenerational transmission of employment. Indeed "the offspring of parents who are already employed in a profession may receive, directly or indirectly, some occupation-specific human capital from their family" (Pellizzari, et al. 2011, 5). Melvin Kohn's (1969) study of child-rearing values of parents, suggests that at least for some traits, parents' experiences in the workplace are generalized and passed on to children. Kohn finds that parents with high levels of, what he named as, "occupational self-direction" emphasize curiosity, self-control, happiness and independence as values for their children. Those who are closely monitored by supervisors in the workplace, emphasize conformity to

external authority. Regardless of which characteristics are emphasized or not, Kohn concludes stating that “whether consciously or not, parents tend to impart to their children the lessons derived from their own social class and thus help prepare their children for a similar class position” (Kohn, 1969: 200).

It is also important to highlight the fact that individual development and the human capital formation is strongly influenced not only by family background but also by the location child upbringing; therefore, by the sociocultural environment in a broad sense. "The intertemporal evolution of individual human capital is affected by the human capital of parents (...) and by neighbourhood effects" (Ioannides and Loury, 2004: 37). As a consequence, contexts, beside family, are crucial in individual attainment and are part of non economic factors.

The so called "local spill-over" is well documented by Ronald Benabou (1994; 1995). In his studies, he paid specific attention on the local determinants in the accumulation of human capital. It refers to "the non-fiscal channels through which the young's acquisition of skills is affected by the social mix of neighbouring families" (Benabou, 1994: 5). Sociologists have argued, long before economists, that "one's neighbours matter" in individuals' decisions and development. However, economists also recognize the importance of non-market interaction in the individual's choices. Individuals are not isolated; they are part of a network of "friends, relatives, acquaintances, neighbours, that jointly provide cultural norms, economic opportunities, information flows, social sanctions and so on" (Topa, 2001: 3). These clearly influence an individuals' motivation, aspirations, role models, norms of behaviours, etc. Eberharther (2012) explains, as in the labour market, individual behaviour will reflect those attitudes preferences and social skills acquired during the socialization when growing up.

There are studies explaining that the cultural group often became the "reference group" and the individual's ambitions are especially liable to be influenced by it. According to the reference group theory formulated by Merton (1953) and Boudon (1974), individuals tend to compare their achievements to the group from which they come from. Bowles and Gintis (2002) identified group membership and personality as important factors in the intergenerational transmission of economic status. Groups and local community may differ in the level of schooling, economic success, wealth level and cognitive capacity. Following this approach, uneducated environments transmit less ambition and taste for economic success in comparison to educated environments and

this would be a cause for status persistence between father and son. As a consequence, "agents with lower-class origins are less motivated to make human capital investments and to acquire high productive abilities, since they have less to prove to the outside world and they can easily maintain their initial social position. Conversely agents with upper-class origin are more motivated and are able to maintain their initial social position" (Benabou 1994: 239).

Bervoets et al. (2012) made a division between socialization inside and outside the family. The former is called vertical transmission while the latter is called horizontal transmission. They proposed a model to represent that the correlation between educational achievement of father and son can possibly result from peer effects, abstracting from any direct parental influence. According to their model, children inherit from the father the same local community and social network, and even if the children have no direct contact with their parents, they are exposed to the same education environment of their parents. There are overlaps in the surrounding that have influenced and influence their educational decisions and they show the cost of inheriting a low educated environment. They assert that individual "choose their optimal educational efforts but (...) interacting with uneducated individuals lowers the returns from effort." (Bervoets et al., 2012: 2) This would be the negative peer effect and they explain that by mixing individuals from differently educated local communities, and by encouraging them to interact, there would be a reduction of correlation in education status between generations.

Continuing on this matter, it is important to mention that in some societies, residential segregation or polarization of urban areas may exist. This reveals a tendency to segregate into homogenous communities. When a high-status family entirely lives in a determined residential area, while low-status families live in others, there is a sort of separation and as a result it is possible to speak of segregation. As mentioned before, local community may differ in a variety of dimensions: average level of schooling, economic success, cognitive ability and wealth level. All of which can affect future children development. Indeed some authors assert that "socio economic segregation makes inequalities more persistent" (Benabou, 1994:2), hampering social mobility. Children from poor families are more likely to face adverse home environments, to live in deprived neighbourhoods and to attend lower quality schools, in comparison to the more privileged, and hence these factors may be primarily responsible for the

differences in attainments (Jekins and Siedler, 2007). Communities with a higher percentage of educated workers constitute to a more favourable environment. Anderberg and Andersson (2007) explain that this creates a "self reinforcing feedback" since the superiority of the community persist due to education incentives coming with a better environment. On the contrary, adverse social and cultural environments can generate a lower expected return to skill acquisition that lead to a reduction in educational investments. The factors influencing investment decision in human capital will be explored in the following sections. As far as local division among communities is concerned, the house market can also contribute in reinforcing the local division among communities. In this case, parents' economic resources might be a factor affecting the residential decisions of individuals. It may not be a simple task for a poor family, one that highly values education, to acquire a substantial debt to move into an affluent and well-educated community. However the sociocultural level of parents is a determinant on decisions related to the environment in which parents wish their children to spend their childhood and adolescence. In fact, a family could be, more or less, interested in living in a stimulating sociocultural environment; "differences in ability to pay for community quality tend to complement differences in willingness to pay" (Benabou, 1994: 15). Feinstein et al. (2004) point out that parental education is a mediating factor to the use of parental resources. Beside income constraints, parents with higher levels of education may spend income differently to those with lower education. "Education changes the nature of the effect of income in that those with more education might spend more of their income on developmentally enhancing resources" (Feinstein et al., 2004: 7). As previously mentioned, beside income constraints, the education of parents modifies the share of resources devoted to goods and activities that favour children development. Therefore children of more educated parents will tend, on average, "to benefit from warmer, more supportive parenting, live in safer neighbourhoods with better institutional resources and more positive role models, be placed in higher quality pre-schools and attend more successful schools." (Feinstein et al., 2004:13)

Ultimately sociocultural background, parents and local community features have a crucial role in shaping future children development. In Italy, the sociocultural background has much relevance to human capital formation. Low educated families may not encourage education, and low levels of schooling constitutes to a higher

difficulty to social introduction in different sociocultural contexts. Checchi et al. (1999:352) assert that "standard measures of intergenerational mobility between occupations and between education levels indicate that in Italy poor and non-educated families are less likely to invest in the education of their children and to move up along the occupational ladder".

As mentioned, the Programme for International Student Assessment (PISA) monitors the outcomes of "education system in terms of student achievement on a regular basis and within an internationally accepted common framework" (OECD, 2003:4). PISA assesses the variance in student performance. Generally there are few differences in the first years of lives; however large differences emerge over time.

Braga and Filippin (2012), using the results from international standardized surveys on students' competences, desired to assess the existence of inequality in the educational achievement of Italian students. Italian students, compared to other countries, during primary school perform relatively well and there are few differences among Italian students. In the passage from primary to secondary school, student performance declined, ranking below the international average. In addition, the differences among Italian students widened. Braga and Filippin (2012) decided to measure inequality in competencies among students. On national territory, the average inequality among students at 10 years old resulted to be 0,067. After controlling it to familiar socioeconomic background, it changed to 0,059. Additional controlling of the result to the school socioeconomic environment, it was further reduced to 0,051. At 15 years old, inequality in competence among students grows substantially. The index became 0,12. Controlling it for family environment it had it seen reduced to 0,11 and when controlled also for school environment effects, it declines to 0,087. Thus, the sociocultural background is significantly important for the acquisition of competences and school achievements. Accordingly, the study proves that a significant heterogeneity among different geographical areas of the country exists. Bratti et al. (2007) suggest that family, school, socioeconomic environment, local community and many other factors are determinants of student performance and achievements. The conditions in the labour market and the level of criminality can explain the 20% in differences to the results amongst students.

Another relevant feature of the Italian society is the high rate of young men living with their parents (according to Mocetti 2007 more than 80% of Italian men aged 18-33 live

with their parents). This signifies that individuals separate from family rather late. Moreover, when there are unfavourable conditions, "family furnishes the support and insurance that the welfare state fails to provide" (Mocetti, 2007:15). The point is that cohabitation might be an element that negatively affects intergenerational mobility. Indeed living with family for an extended period of time apparently affects the nature of one's belief and may reinforce the transmission of preference. "Individuals may feel forced, or may prefer, to choose occupations similar to those of their relatives in order to comply with social convention, or family tradition" (Mocetti, 2007:16). Cultural constraints are identified by Checchi and others a crucial reason of the low investment in human capital by non-educated families, that in turn foster socioeconomic status persistence across generations. This section has outlined particularly important non economic factors that can underpin high levels of social immobility. In the following section, the prominent role of human capital investments in fostering social mobility will be thoroughly analysed.

2.3 Institutional factors

Analysing the institutional factors affecting social mobility education plays a central role. It is one of the most significant and most studied channels that can promote or hamper intergenerational mobility. It is a crucial institutional pillar for each industrialized country. The first chapter analysed the study of economists and sociologists facing the same phenomenon. An economist's focus is generally on individuals' future income while a sociologist's generally focuses on occupations. However the two facts are strictly correlated and both economists and sociologists deem education as a principal factor to promote mobility. Indeed individuals invest in education, believing it to improve their employability and earnings. Individuals study and reach a specific unit of productivity, which they offer in the labour market. Accordingly to the level of education, they achieve a specific occupation with a specific wage. The remuneration paid for employment should compensate the previous human capital investments. For these reasons, the concept of wage as an integral part of the individuals' income is linked to occupation and education. The economic factors will be studied in the following section. However, in dealing with education many economic

considerations will enter into account. As has been said in the first section, the different factors interact with each other and occasionally a marked line cannot be evidently drawn to divide them.

Education and other human capital investments are central to modern economy. Education has been interpreted as one of the main drivers of occupation mobility and of social mobility in general. "In modern societies, education is the gateway to employment" (Tverborgvik, et al., 2013: 546). According to Ganzeboom and Treiman (2007), in modern societies, occupational position depends on education due to the fact that "formal education is the primary mechanism by which people acquire the skills and the credentials necessary to perform specific jobs" (Ganzeboom and Treiman 2007: 4). Human capital according to Tomes and Becker contributes to one's productivity and enhances the ability to perform specific tasks. Education should be a channel through which talents are tested and discovered, where individuals' abilities, capacity and productivity are developed.

Ishida et al. (1995) explicit that role of education varies according to the occupation taken into account, suggesting that education is in fact irrelevant for particular occupations such as small employers, the self-employed and farmers. It is true that for some occupations, familiar training may be more adequate. Nonetheless, educational achievement is a crucial factor for individuals to alternate position compared to the position of their parents (Tverborgvik, et al. 2013). It is utilised as an instrument to acquire different skills and to realise an individual's perspective from a family's socio economic position.

Education is interpreted as one of the most important intervening factors that may mediate the influence of factors (such as the sociocultural and economic backgrounds) that are beyond the individual's control, thus it allows individuals coming from disadvantaged social conditions to improve their destinies. Each individual commences from a different point and if offered to all children, regardless of their social origins, the same instruction quality and quantity, education becomes a central element in equalizing individual opportunity. It should promote the goal of social mobility, providing equitable opportunities and thus making possible for anyone with ability and motivation to succeed.

In an egalitarian and education-based meritocracy society, the achievement of a specific socio economic position "depend solely on individual education and school competition

is not biased in favour of any particular social category". (Goux e Maurin 1997). Remarkable individuals will be rewarded, educational attainment would depend exclusively on personal ability and qualification would not depend on parental status. As explained in the previous section, each individual comes from a diverse sociocultural background. Non-economic factors, which are out of the individual's control, should not have a preeminent role in affecting future individual attainments. Children endowments need to be developed notwithstanding parents' background. Individual talents and efforts should be the only elements playing a role in individual educational achievements and obtainment of different qualifications. If different and ascribed factors, such as sociocultural and economic backgrounds, enter into play this means that elements beyond individual capabilities enter are considered also and this would hamper social mobility. Similar considerations will be made in the next section, when analysing the role of liquidity constraints upon human capital investments.

Education, according to Torche (2013), provides the ticket to meritocracy. Indeed the level of education attained is one of the main determinants in the relative positioning of job candidates; "the higher the level of education achieved, the higher are the chances of a better position in the job queue and of obtaining a job with a higher occupational status." (Muller and Gang, 2003: 225).

Nonetheless it has to be stressed that a strongly significant influence of parental background on educational attainments emerge everywhere. Empirical studies reports that "educational attainment and qualifications are significantly correlated across generations" (D'Addio 2007: 51). As mentioned previously, children of more educated parents tend to achieve higher educational qualifications. The existence of a positive correlation among educational outcomes of parents and those of their children is measured through intergenerational educational mobility. The strength of this correlation varies in each society, and will be investigated in Italy where such a correlation is considerably high in comparison to other countries. The point is that a similar educational pattern between parents and children increases the possibility for a similar occupational career and thus the transmission of socioeconomic status from father to son. Feinstein et al. (2004:1) states that "the intergenerational transmission of educational is a key driver of the persistence of social class differences".

To investigate an individual's educational career compared to that of his parents, it can be beneficiary in understanding intergenerational occupational mobility. Following a

different educational path from that of the parents, may signify future occupational mobility. Otherwise, the son's imitation of his father's school curriculum increases the probability of passing through a similar occupational career, thus it is likely that the son will have an equivalent socio economic position of the father, without experiencing mobility. It has already been elucidated that lower educated parents may not value positive education and may regard the children's contribution to family income and finances as more significant than their education. Thus if a father has a low skill job that does not require educational qualification, such employment is likely to be passed down to his son, hence continuing the legacy with a lack of education. On the other hand, children attending higher or different levels of school, from that of the father, might signify the individual's decision of undertaking a different occupational career. If the father's occupation requires particular educational attainments (university degrees specifically), the intergenerational occupational immobility must be preceded by intergenerational immobility in education. If the son undergoes the same educational career that of his father's, he may or may not occupy the same job position of his father. In the first case, both intergenerational education and occupational immobility will exist. The main role of "education is to promote social mobility; but at the same time a majority of what social reproduction there it is transmitted through education, so education is also the main vehicle of social reproduction." (Ganzeboom et al., 1991: 284).

The high level of correlation in educational achievements between father and son represents an influence of parental background. Several researches exist, displaying emphasis on the father's occupation, education, income, over children educational attainment that in turn influences the occupational attainments. The first section investigates that sociocultural environment and the parents' level of education largely influence an individual's educational attainments. In addition, a significant influence of parental occupation on educational attainments emerges everywhere, especially in Italy (Franzini et al., 2013, 8). Blau and Duncan 1967 proposed to study that the son's occupation depended on educational attainment that, in turn, was determined by the father's education and occupation, emphasizing the importance of social origins. The previously cited research of Raitano (2009) on the influence of family background on education attainments, demonstrated that "the probability of attaining a tertiary degree is significantly higher everywhere for students coming from a better occupational

background than for those whose parents had an elementary job" (Raitano, 2009: 339). This means that educational qualifications might depend on parental background, making education a channel that does not promote mobility, but foster status reproduction. In this case, education would not offset the role of social class in determining economic outcomes.

The family income may also have an impact on children's education path. According to the "Human capital view" inspired by Becker and Tomes, the transmission of socioeconomic position across generations is mostly imputed to liquidity constraints in human capital investments from families coming from disadvantaged backgrounds. There can be differences in the quality of education and expenses, if the quality is associated with higher fees and there is no state intervention, children born into a high-income family will be more advantaged with respect to children coming from disadvantaged situations. They will have a significantly greater educational opportunity that, in turn, affects future occupational opportunities. The impact of economic constraints on future individual educational and occupational attainments will be the subject of the next section.

To understand the low level of social mobility in the Italian society, it is crucial to analyse its educational situation. Indeed, notwithstanding the increasing level of educational enrolment of the population, the intergenerational educational association among parents and children remain relatively high and as previously explained, it can be a precursor of occupational and income immobility.

After the Second World War, the fraction of the population attending school and receiving higher education levels has substantially grown across generations. In particular, access to upper secondary education has expanded over the last 30 years. According to an OECD report "Education at a Glance 2011" in Italy the number of 25-34 year-olds who have an upper secondary or higher education is at least 30 percentage points greater than the number of 55-64 year-olds with similar levels of education. However the Italian performance compared to other OECD countries is not particularly stunning. The same report alludes that 70% of 25-34 year-olds in Italy attain an upper secondary education, well below the OECD average of 81% (ranks 29 of 35). Italy has one of the lowest tertiary attainment rates among OECD countries: 20% of 25-34 year-olds in Italy attain this level of education compared to the OECD average of 37% (ranks 34 of 37).

Checchi (2003) shows evidence that "Italy is characterised by low educational achievement when compared to other European countries with similar levels of development; with a sizeable gap with respect to tertiary education, while a reducing one in the case of upper secondary education. Even if more recent cohorts face better prospects in terms of educational attainment, educational choices in Italy are still strongly affected by parental education" (Checchi, 2003: 7). In fact "despite this expansion of higher school qualifications, not real and stable reduction of class inequality in terms of educational opportunities has occurred " (Schizzerotto and Pisati 2004:151; Schizzerotto 1997). This is, yet again, the difference between absolute and relative mobility: although structural changes have led to an increase in mobility this does not automatically lead to an increase in relative mobility. In spite of educational expansion, opportunity is not equally distributed amongst individuals.

Bratti et al. (2008) studied the role of the expansion of higher education in increasing the equality of tertiary education opportunities. They analyse Italy's experience when in 1990s policy changes prompted institutions to offer a wider range of university degrees and to open new sites in provinces. "The results suggest that the expansion might have had only limited effects in terms of reducing existing individual inequality in HE (higher education) achievement as the greater availability of courses had a significantly positive impact only on the probability of university enrolment but not on that of obtaining a university degree" (Bratti et al. 2008: 4). They also mention that if an expansion of tertiary education exists, it doesn't particularly signify that all benefit from it in the same way, especially individuals from less privileged family backgrounds. They demonstrate that the expansion of university courses has increased the likelihood of university enrolment, notably for students coming from middle class parents. "However, the expansion in enrolment has not translated into an increased probability of attaining a degree. Thus, we observe a reduction in inequality of opportunity that is only apparent, since the odds of students from different social backgrounds graduating seem unaffected by the increased availability of university courses" (Bratti et al. 2008: 4). Education should be the greater equalizer however if social origins have an impact on educational decisions and achievements, education cannot unroll its role in favour of social mobility.

As mentioned, Italy displays consistent levels of intergenerational educational immobility which is a key driver for the persistence in class differences. One of the

most recent cross-country comparisons in the field is that of Hertz et al. (2008). The paper represents and analyses 50 year trends for 42 countries. Through regression analysis they calculate the children's schooling and that of the parents, and the correlation between the two. They used information on parental education between 1985 and 2004. On a ranking of 42 countries, Italy is positioned seventh for parent-child schooling correlation. Italy, among the thirteen high-income western nations analysed, shows the highest level. The regional average is 0.39 while Italy has 0.54. The Italian score shows a higher rate of persistence even in comparison with the U.S and the U.K. In accordance with the findings of the first chapter, the four Northern nations (Denmark, Finland, Norway and Sweden) have an average parent-child schooling correlation of 0.34, an obviously low rate of persistence. These findings are consistent with those of D'Addio (2007) and Checchi (1999; 2013) among others.

Checchi et al. (1999) compared Italy with the U.S. and he discovered that for educational attainments "the role of family background is surprisingly more important in Italy" than is U.S. (Checchi et al. 1999: 365). Shavit and Blossfeld (1993) find that, in some countries, a decline exists for a fathers' occupation on a son educational attainment, yet for Italy the opposite trend was discovered. The same findings emerged in a more recent analysis carried out by Breen and others *"Non-Persistent Inequality in Educational Attainment: Evidence from eight European Countries"*. The investigation aimed in presenting the non-persistent inequality in educational attainments; they successfully demonstrated it for 6 countries out of 8 however Italy was one of the countries excluded from such findings. In conclusion, in Italy "educational opportunities remains unevenly distributed among social classes, and education is a strong predictor of occupational attainment upon entry into the labour market" (Barone et al. 2011:377). Checchi et al. (1999) assert that "standard measures of intergenerational mobility between occupations and between education levels indicate that in Italy poor and non-educated families are less likely to invest in the education of their children and to move up along the occupational ladder" (:7). Checchi et al. (1999) in their analysis showed that the probability that the son of a graduate is, himself, a graduate is 65.1% whilst the probability that the son of a non-graduate reaches a college degree is 7.1%. In a more recent empirical investigation, Checchi et al. (2013) have shown that "the child of a college graduated father has about a 20% higher likelihood of obtaining a college degree than the child of a father with only high school qualifications and a 50% higher

likelihood of obtaining a college degree than the child of a father with lower secondary education or less" (Checchi et al. 2013: 232). Their research displayed that the high Italian intergenerational educational persistence is principally due to "a much larger probability of obtaining a college degree of children of highly educated fathers." (Checchi et al. 2013: 229). Specifically for tertiary education, children participation is highly correlated with educational attainment of their parents.

The presence of a high level of correlation between parent and children and the parent background influence on educational attainments, is at odds with the educational system adopted in Italy. Indeed it is a public, egalitarian and centralized system. It is financed through taxes by the government. As a consequence income constraints should not be sought as a primal reason to explain the immobility. Sons of low-income families should have a considerable opportunity to experience educational upward mobility. However it has been shown that low educated and low-income family invest less in education. Liquidity constraints may enter into play, especially if investments in human capital are risky, i.e. time-resource invested are not adequately rewarded. This issue will be investigated in the following sections. Low human capital investments can be imputable also to "cultural constraints". Doubtlessly, as previously analysed, highly educated parents are probable to spend their resources differently from lower educated parents. The previous section described the fundamental role of socio cultural background on an individual's development. Individuals can be positively or negatively affected by their family, their neighbours and local community as well as their reference group beside liquidity constraints. According to Feinstein et al. (2004:14) "empirical investigations tend to find that the effect of parental education on children's attainments is at least as great as the effect of income." Esping-Andersen (2007), on his analysis on the PISA data, concludes that the cultural effect in accounting for cognitive differences among 15-year olds is far stronger than income effects.

In Italy "children from uneducated parents are more likely repeating some year, ending compulsory school with low evaluations and following their teachers' advice to enrol vocational or technical schools " (Checchi 2003:25). Families that are economically disadvantaged and uneducated may prefer children's economic contribution as soon as possible, disincentivating the continuation of studies or tracking them into quick, or more vocationally oriented, educational lines. An interesting feature of the Italian school system is the role of school tracking, meaning the allocation of pupils by

academic ability into a certain curriculum. In Italy, as with the majority of the country, primary school is comprehensive, however after a selection form occurs at the age of 14. They are then organised into the following institutions, for higher academic education (licei), technical schools (istituti tecnici) or a vocational education (istituti di formazione professionale). Mocetti (2007) explains that the choice of secondary schools leads to different educational careers. "Later options are heavily conditioned by earlier choices. Almost all who attend a liceo go to university, while the majority of those who attend technical or vocational schools choose to go to work after the diploma. Parental education and socioeconomic status appear to be the main determinants of educational choice, and this reinforces intergenerational immobility. " Mocetti (2007:13).

In this process, the sociocultural and economic backgrounds may play a decisive role in affecting future opportunities. School decisions are, at least impart, conditioned by family. Earlier should the tracking occur, stronger is the effect of the family in this transition stage. In Italy the earliest selection age is at 14-years old and "a large proportion of individuals leave school at this stage" (Mocetti 2007:15).

Brunello and Checchi (2006) show that in Italy, tracking increases the effect of family background on education (measured by completed years of education, probability of dropping out, enrolling or graduating in a college). And through the effects of tracking on educational attainments, they stated that family background also influences future individual's earnings. According to Maestri et al. (2011) "early tracking is likely to affect educational inequality, since it reinforces the ability gap between pupils coming from different family backgrounds" (: 44). Checchi and Flabbi (2007) compared Italy and Germany since both have separate tracks at secondary school. They discovered that the sorting of students across secondary school tracks is nearer to the sorting by ability in Germany and closer to a sorting by family background in Italy. They demonstrate that the "greater flexibility of the Italian system (where parents are free to choose the type of track) translates into greater dependence from parental background. These effects are reinforced when moving to post-secondary education, where the aspiration to go to college is affected not only by the school type but also (in the case of Italy only) by parental education" (Checchi and Flabbi, 2007:22). It is considerably interesting to note that the same institutional framework may produce diverse outcomes. The institutional factors interacting with the sociocultural factors examined, result in that the

existence of school tracking in the Italian socioeconomic context seems to foster intergenerational social immobility.

To conclude, whether family continues its importance for children educational attainments, education cannot carry out its positive effects on social mobility. It has been formerly highlighted that poor and low educated parents invest less in education. Low educated parents are likely to occupy a job position that does not require specific skills. Lower-skilled and less-educated workers are commonly paid less. "Cultural constraints" and "liquidity constraints" lead in regards to a child's rapid contribution to family income being more important than their education, fostering the legacy with a lack of education. Similar level of educational correlation between father-sons increases the probability of going through a similar occupational career. Naturally much of the socioeconomic status reproduction is transmitted through education. This phenomenon can be a significant explanation for the low levels of intergenerational occupational mobility within semi and unskilled working classes. Indeed, as presented in the first chapter, children from these sectors are among those experiencing lowest intergenerational occupational mobility. In the following section, income constraints along with the return on human capital investments in the Italian society are further analysed.

2.4 Economic Factors

After analysing the institutional factors, it is crucial to immediately complete the picture explaining the role of economic factors in relation to human capital investment.

A fundamental point is that investments in education are motivated by return on such investments. The incentive to accumulate human capital is provided by the prospect of future gains. Investments in human capital should enhance individual ability to perform specific tasks and increase the levels of productivity that should be rewarded in the labour market. Education can be viewed as an investment good. In fact, an educational choice is an investment decision, since families honestly of the candidate will renounce current income opportunities in exchange for children receiving superior income prospects that are strictly linked to the job position that they will attain. Additional education is associated to the incentive for better employment and income prospect

during one's working life. The future job occupation, through the perceived income, should compensate the precedent investments. As a result, investment decisions depend on return on human capital investments, however they can also depend on the presence, or none, of liquidity constraints.

If families have different economic capacities and no State intervention exists, a family with limited economic resources will see its capacity to invest in children education limited. In this case the role of income over intergenerational occupational mobility is considered indirect i.e. through education. As a matter of fact, in a number of countries liquidity constraints affect skill formation and human capital accumulation that, in turn, affect individuals' future occupational opportunities. Limited access to education has consequences on future labour attainments. In terms of job positions and incomes perceived. Education is a central element in fostering social mobility or reinforcing socio economic status persistence.

These two concepts of liquidity constraints and return on education have been formulated and linked to economic functions by Gary Becker and Nigel Tones. The first formulations of the Human Capital Theory, Becker was concerned with activities that had influence over future real income, such as human capital. The first formulation of liquidity constraints on human capital investment do not enter into play, resulting in a perfect market. This indicates that a family can borrow what it needs. As a result, future human capital return depended on two variables. Firstly it depends on family's human capital investment on the level of education achieved by individuals, as analysed in the previous chapter. Secondly it depends on endowments such as genetic factors, which were explored in the first section. According to Becker and Tones, the former are driven by an altruistic concern for the well-being of their progeny and the latter are determined by the degree of inheritability in accordance with the previous analysis.

In the circumstance of a perfect capital market, the relation between investment in human capital and earnings is represented as follows:

$$H_{t+1} = H(X_t, E_{t+i}) + w_t$$

H_{t+1} represents the return to human capital investments (expected earnings) and it is the dependent variable. It is dependent on the other three variables. E_{t+i} is the inherited children' endowments. It includes the non-economic factors previously investigated:

genetic and sociocultural endowments. These are transmitted from parents to children and they have no concern with investment. According to Becker, and conforming to other authors mentioned in the previous sections, genetic abilities are only partially inherited. The other variable influencing the return to human capital investments is X_t , the expenditure of parents in children's human capital such as in education. It can also be replaced by public expenditure in education. w_t is the market luck.

Becker explains that parents not only pass on some of their endowments, they also influence the adult earning by expenditures on their "skills, learning, motivation, "credentials" and these expenditure are determined also by the incomes, preferences and fertility of parents as well as the public expenditure on education and other human capital and other variables" (Becker e Tomes 1994, 262). In fact, as explained in the first section, beyond genetic features that can be passed on to their children, parents influence individual future development using their resources for creating a learning environment, impacting their motivation, deciding the environment for child upbringing and so on. The cultural component that affects all these decision has been underlined. Future children attainments do not depend exclusively on family's economic capacity however also on their parents' sociocultural level. The expense for individual development can also be borne by the state through public expenditure on education.

The perfect market hypothesis assumes that because of absence of liquidity constraint, better-endowed children will have higher expected returns (in this case higher expected earnings). Moreover "more talented people will demand more education, because their marginal return is higher" (Checchi, 2006: 26). As a consequence it is important that talented people, regardless of their economic conditions, can have the possibility to maximize their investments in human capital. In a perfect market, poor parents can borrow what is needed to finance the optimal investments. Since there are no liquidity constraints, the returns depend mainly on endowments. The status correlation among parents and children will simply display the "natural" linkage across generations, the genetic transmission of talents and abilities analysed in the first section.

Then Loury (1981) and Becker and Tomes (1986) introduced credit constraints into the model. Therefore, in addition, to individual's endowments and the parent's human capital investments, the circumstance in which the parents cannot borrow to make human capital investment for their offspring is introduced. Investments in human capital are different from investments in physical capital; in fact human capital is embodied in

individuals and cannot be resold. As a consequence, there can be market failure and imperfection in access to capital. "Poor families often have difficulty financing investments in children because loans to supplement their limited resources are not readily available when human capital is the collateral" (Becker and Tomes, 1994: 291). Resultantly, human capital investments may depend on the distribution of earnings among parents. If credit markets fail then the distribution of income among parents will affect the efficiency with which overall training resources are allocated. If parents, concerned about the welfare of the children, are unable to borrow what is necessary to maximize their utility, there will not be optimal human capital investments since investments are limited by capital market restrictions. When capital markets are not perfect, the child's level of human capital depends on parental income. In this case there would be a difference of opportunity in developing individual capacity and talents depending on family economic resources. "If capital markets are not perfect, and public institutions do not compensate for this effect, investment in human capital of individuals coming from disadvantaged backgrounds are limited by lack of liquidity" (Franzini et al., 2013:3).

Imperfect credit markets prevents poor agents to invest optimally in human capital, resulting in less chances to experience mobility compared to the socio economic position of the parents "dynasties with little initial wealth face limited investment opportunities, and they remain poor" (Piketty, 2000: 460). The arbitrariness of being born in a family capitally constrained or not capitally constrained may make a difference. "Empirical observations strongly indicate that richer families come closer to financing the optimal investment in the human capital of children than do poorer families" (Becker e Tomes, 1994: 272) as a consequence, the wealth effect on investment in children dominates the endowment effect. Child earnings, in the imperfect market hypothesis, depend on the earnings of parents and not only on the transmission of endowments. In this case "education can be the main avenue for socioeconomic reproduction if wealthier parent are able to afford more and better education for their children, which in turn will pay off in the labour market." (Torche 2013, 2).

Although the model specifically refers to income mobility, it is also valid in regards to occupation. In fact, as elucidated, education, income and occupation are strictly correlated and are different aspects of social mobility. Highly educated workers should attain a more prestigious employment, usually consisting of superior salaries. In point of

fact, if there are capital market imperfections "the pattern of occupational choice is determined by the initial distribution of wealth (...) as a result occupations that require high levels of investment are beyond the reach of poor people" (Banerjee and Newman, 1993: 74).

Regarding the institutional factors, it is interesting to see how economic factors, in the Italian society, influence educational decisions. The previous sections analysed the relevance of the sociocultural conditions of provenience. It is important to analyse the economic factor intervention in the Italian sociocultural and institutional framework. It signifies investigation if economic constraints play a role in human capital investment decision and if the investments made, are adequately rewarded in terms of occupational position and paid wage.

For what concerns the first point, it is important to highlight that the Italian educational system is public. Meaning it is financed by the government. As a consequence, the *direct monetary costs* of education such as tuition fees, book purchase and transport are lower compared to a society in which the public sector do not intervene at all. However, despite the expectation that the Italian educational system should foster mobility, there exists consistent differences in the level of resources invested by families and this correlates to their economic situation. Piraino (2007) in his analysis over the Italian situation, also analyses mean fathers' income (in logs) for five classes of sons' educational attainments. He shows the existence of a relationship between levels of education and fathers' income, with graduates having, on average, wealthier fathers. Higher-income and well-educated families tend to invest more in their children human capital. One of the primary answers to explain the low level of investments by lower-income families has been found not in "liquidity constrains" however in "cultural constraints". Nonetheless, income constrains can play a significant role in the pursuit of the most prestigious careers where long time human capital investments are required. Or, when the quality of the school is not homogenous and in this case wealthier parents may be more willing to pay a higher rent to live in neighbourhoods where those schools are located and/or they are less constrained by transport costs. Moreover, the attainment of specific academic qualification may require temporary transfers that require consistent use of resource. Territorial mobility in Italy is a growing phenomenon due to disparities on the territory. It is largely documented the level of Italian territorial mobility especially for tertiary education between southern and northern regions and the

difference of living costs across the country. However, an individual's migration has some costs that have to be borne by the family and the parental resources might be determinant in the decision to move. More affluent families may easily afford territorial mobility for studying reasons. A greater effort is required from a family with lacking economic resources that is unable to finance these migrations costs.

Furthermore, to invest in education beyond direct costs (such as tuition fees, book purchases, transport, living costs, etc.) some indirect costs exist. If the school system is public, part of the direct costs are borne by the state however the indirect costs are borne by the family in any case. Indeed indirect costs (or opportunity costs) correspond to the forgone income due to school attendance. This means the time and engagement employed in school attendance cannot be devoted in the labour market. Thus "the students gives up a corresponding fraction of the income that would have been earned had the entire time-span been spent in the labour market" (Checchi, 2006: 22). Opportunity costs are often underestimated, yet can be particularly high, such is the case in Italy, given the duration of tertiary education (Mocetti, 2007:13)

Also, in this case, economic resources have relevance since limited resource families might be more prone to preferring the economic contribution of their children as a worker as soon as possible rather than the incentive of their human capital investments. Mocetti (2007) explains that, also as in Italy, underprivileged parents may prefer to see their children become independent earlier on, thus tracking them into quick, or more vocationally oriented, educational lines.

Considering the direct and indirect costs of investing in education, the importance of adequate returns from human capital investments is absolutely clear. Individuals invest in education because they expect it to increase their employability and earnings. The expected returns must outweigh these costs; otherwise there is no incentive for investing in education. In fact, the low levels of return from human capital investments, that characterize the Italian society, are a likely reason that negatively affects investment decision of low-income families.

As explained in the first part of this section, according to the Becker and Tomes theory, greater human capital investments should be associated with better employment and income prospects. Insufficient return to education signifies the existence of a lack of incentives to undertake time-resource investments, above all for underprivileged people. If agents find that human capital investments will provide expected returns, a greater

amount of resource will be spent to invest in it. Increasing returns for a higher level of schooling provides the right incentives to proceed in education. Otherwise a family with few resources will not assume the risk, as opposed to wealthy people that can more readily tackle the risks. It is clear that such dynamics creates an obstacle for social mobility.

The lower return on human capital investment in Italy, in comparison with other societies, is studied by a diversity of authors. Schizzerotto (1997) asserted that educational qualification still possesses a legal value in Italy. Indeed, despite low levels of return from education, some authors highlight the fact that higher levels of education reduce the probability of unemployment. Bernardi (2003) demonstrated that secondary education diploma-holders and university graduates with good academic performance "actually have a higher chance of finding their first job, when compare to school-leavers with compulsory education. Thus it seems that educational attainments also has a pay off in Italy, in terms of the duration of the job search." (Bernardi 2003:39). Although, as explained also by Ballarino and Schadee (2013), unemployment risk remains higher for the lower educated individual, Checchi (2003) shows that when compared to other European countries Italy exhibits inadequate rates of return from education. Checchi (1997) creates a comparison between the U.S., Germany and Italy and he discovered that education pays less in Italy. In another work, he compared the U.S. to Italy and asserted that mobility is higher in the United States than in Italy and the lower return on education investment is an explanation. Ballarino and Schadee (2013), in a recent analysis, conclude that in Italy the returns to education in the labour market are decreasing and they have established that agents with university degrees have a lesser probability to access the most privileged of classes. "In 1985, a man had a probability of almost a half to enter the bourgeoisie upon university graduation, while in 2010 this probability is less than a quarter." (Ballarino and Schadee, 2013: 375). Regarding the possibility to avoid entering the working class "in 1985, upper secondary degrees almost completely sheltered their holder from this «risk». Now, half of the men with this education get a working class job. Lower secondary certificate used to be associated with a non-working class position in about 1/3 of the cases for men, while the proportion declined to around 1/5." (Ballarino and Schadee 2013: 383)

This phenomenon leads to displacement in the labour market. Displacement in the labour market defines the misallocation of individuals according to their level of

productivity. If job-workers are mismatch in the labour market, individuals will occupy a position that does not maximize their productivity. Doubtlessly, if those with the highest levels of education cannot find an adequate occupation, they will probably compete with those holding an upper secondary qualification for a medium level occupation. If the individual with the highest degree of qualification attains employment, then it will result in the displacement of another individual. Checchi argues that educational systems that are too egalitarian lead to lower returns from education and this affects mobility. Ballarino and Schadee (2013) believe that the explanation can be found in "the imbalance between the expansion of education and the (lacking) upgrading of the occupational structure (...) that appears to be particularly pronounced in Italy" (Ballarino and Schadee, 2013: 382). Other authors make apparent that family background affects individual occupational attainments not only indirectly, i.e. in education; however also directly. If family backgrounds are considered in the transition from education to the labour market, then this may signify in candidates being chosen for reasons beyond individual productivity gained through education. Ganzeboom and Treiman (2007) suggest that if family background must have some kind of influence, it is better to have it on education rather than directly on the labour market. "Assuming that the educational system recognizes talents better than the labour market - where power and family network distort the allocation of people to jobs - the influence of background on education could be more socially acceptable than the influence of background on occupation " (Franzini et al. 2013:7). Despite equal levels of education between individuals, the chances of reaching an occupational position vary according to the social origins; the investment in human capital will not grant everybody with equal expected returns. It is clear that this will disincentive human capital investment especially for individuals coming from disadvantaged situations, to whom, as a consequence, are not given the possibility of experiencing social mobility. Barone and Schizzaroto (2011) outline the main findings of a collaborative project that took into account 6 countries. They established that education has effects on first occupation; however it only moderately mediates the overall influence of social origins. For what concerns Italy, they affirmed "in Italy, three-quarters of the total effect of parental occupation on children's occupations persist once educational qualifications are controlled for". Checchi et al. (1999) in comparing Italy and the U.S., stated that "occupational class of fathers is an important determinant of the occupational

achievement of sons, but in Italy the effect is much stronger than in the US in absolute terms and relatively to the effect of sons' education levels." (Checci et al., 1999: 359). Gabriele and Schioppa (2006) in an economic analysis through multinomial logit models predicted the variations in probability belonging to an occupational position according to social origins and level of education. In addition they confirmed the importance of family background in the Italian society. They analysed data from ISTAT 2000 and then replicated the analysis for data obtained from ISTAT 2006. They stated that the updating of data produced no substantial changes on their conclusions. The research represents that between individuals with the same educational degree, the occupational position of the family increase the probability of belonging to this class. Moreover they discovered that investment in human capital does not always guarantee in expected returns for the lower class. The son of a bourgeois with the same level of schooling of a son not of the bourgeois is more likely found in the bourgeois class. Also Gabriele and Raitano (2007) ascertained that at parity of educational qualification, the probability of acceding to a determinate class position varies according to the class of origins. Raitano and Vona (2013; 2011) made further discoveries that family background "keeps having a strong influence along the entire son's carrier, independently on their educational attainments" (Raitano Vona 2013:2) and this influence is principally associated to a parachute for those descending the social scale in Italy (Raitano and Vona, 2011). Moreover Raitano (2009) found that "independently of the effects on educational attainment, family background – identified by dummies for the highest occupation of father or mother – directly affects wages earned once employed" (Raitano, 2009:340) with the exception of the Nordic countries. In Northern countries, the individual's wage is not entirely related to family background, whilst in Southern countries "an improvement of parents' occupation is always associated with higher wages, also when controlling for individuals' education and occupation (...) being the child of non-manual workers (i.e. parents = managers or white collar) is associated with significantly higher wage" (Raitano, 2009:340).

To summarize, Italy displays high levels of association in the educational attainments between parents and children. Following in the parents' footsteps in education increases the probability for children of occupying the same job position of the father. This phenomenon cannot be explained singularly through income constraints, an explanation should be searched also in cultural constrains and in the low level of marginal return to

education that characterized the Italian society. Families, above all lower-class families, are not stimulated to invest in education that is identified as a major channel to promote social mobility in a society. The low returns on educational investment in Italy are a controversial issue. Empirical evidence shows that at parity of schooling level between individuals and their socioeconomic origins can play an important role in the labour market and obviously this will hamper intergenerational occupational mobility. The next section will analyse how social factors can negatively influence economic outcomes leading to misallocations of human resources in the labour market. In fact social origins may play different roles in the transition from education to labour market. One way in which parents may affect such transition is in the use of family ties and informal methods helping relatives to progress through the recruitment process. "Family background can influence besides education also occupation, employability and earning not only through education but also in a more direct way" (Franzini et al. 2013)

2.5 Interactions between economic and social factors

This last section will analyse the interaction between economic and social factors. Particular attention will be made on the role recovered by the family and the local community in influencing the individuals' entrance into the labour-market. A number of empirical studies demonstrate the use of individuals' social network in lowering the barrier for entrance into the labour market. To find employment, formal or informal methods can be utilised. The formal method includes a source of information "state and private employment agencies, newspaper advertisements, union hiring halls and school and college placement services" (Ioannides and Loury 2004:2). Informal methods can include: "letters of reference, exchange of information about job applicants among entrepreneurs, social ties between job seekers and currently employed workers, and even illicit intermediation." (Pistaferri 1999: 3). Numerous researchers suggest that the role of family background is not limited to the human capital formation. The role of family background in the transition from school to work is considerably relevant, in particular for agents who tend to follow their father's footsteps (Kramarz and Skans 2007).

The use of family ties and the correlated social network to lower the barriers to entry in

the labour market may lead to a misallocation workers-job, interfering with a genuine process of selection. Clearly this misallocation in the labour market, in turn, affects the return on education, and can be identified as a factor influencing the transmission of job and the connected socioeconomic status through generations. Each individual has different social networks that are "an important source of information in the labour market [in fact] many workers find jobs through friends and relatives" (Caliendo et al., 2010:2). The effects of a socioeconomic environment on individual development, studied in section 2.2, are considered in this process. Indeed, Wilson (1987:57) explains that neighbourhoods with "majority of families having spells of long term joblessness, people experience a social isolation that excludes them from the job network system that permeates other neighbourhoods and that is so important in learning about or being recommended for jobs". D'Addio (2007) suggests that the social networks of more educated parents may aid their children in the job-search process, also leading to higher marginal benefits.

Loury points out that roughly 50% of persons find employment through informal contacts (Loury, 2006: 299). Pelizzari made a study on the methods used to find work through agents in Europe. The data, in question, covered the period 1994-2002. He documents that, "together with direct application and answering/placing advertisement, personal contacts are among the most important channels that lead people into jobs." (Pelizzari 2010: 500).

The issue related with the quality of job obtained through informal methods, is a controversial one. In general, empirical evidence demonstrates that "informal search success can be associated with a premium as well as with a penalty in terms of wages and employment stability" (Caliendo, 2010: 2). "Across the countries of the European Union, premiums and penalties to finding jobs through personal contacts are equally frequent and of about the same size" (Pelizzari 2010: 494).

A strand of literary works explains the positive aspects of using informal method. Montgomery (1991) argued that this method reduces asymmetry in information and it improves the quality of matching workers to a job. For example Granovetter (1974) in *Getting a job* explained that this method helps to gather more and better information about the job and its characteristics. It provides information to employers and workers on characteristics that are not observable, about certain qualities of the individuals, "one's network of relative provide an important source of information about job

vacancies and may also disclose to the searching parties (unemployed workers and employers with vacancies) information that would otherwise be unobservable, such as the ability or honesty of the candidate or the quality of the work environment at the offered job.” (Pelizzari 2011: 5) Moreover, it is believed that individuals would only signal people with adequate skills for a question of good reputation (Rees, 1966) and that individuals are linked to other workers with comparable skills. In addition, Montgomery (1991) establishes that firms use such mechanisms also because it "is less expensive than formal methods" indeed in this way, reduced is the cost for searching and publicity for job vacancies. A number of authors believe that the use of informal channels is a signal of market inefficiency, therefore the formal methods are not working adequately and problems in the job searching system persist. "Given the available job opportunities and workers' characteristics, a perfect labour market would allocate individuals to available jobs according to a “matching” mechanism. If this were the case social networks would play no role. Thus, one can argue that informal networks in the labour market may only arise as one of the possible outcomes of labour market imperfections or incomplete information. " (Pistaferri 1999:3). As a result, the use of friends, relatives, neighbours and acquaintances to seek employment can be seen as a means to fill the gap between employers and enterprises.

However, numerous other authors and their studies establish that the use of informal channels does not particularly lead to efficient job matching and this affects negatively to social mobility. Furthermore, Pistaferri (1999), in his analysis, presents that informal networks are more successful than any other job search strategy and shorten the time spent in searching for a job. "The use of informal networks as a job search method is quicker and less costly than other methods" (Pistaferri, 1999: 4). What is important to highlight is that an individual may have social contacts that can provide referrals in occupation that do not maximize their productivity. As a result, individuals may face a trade off in finding employment swiftly or not fitting adequately for the job position.

The role of family ties and social networks "can interfere with a genuine process of selection of workers, favouring socially connected people in place of more talented workers." (Scoppa e Ponzio 2008:1) Each individual possesses different attributes, abilities, skills and productivity. Hence there should be a match between the individual and a job position in the labour market. However if informal methods are used, factors different to productivity may be considered in the selection process. The efficient

allocation of human resources is one of the issues treated in the next chapter. Individuals can be chosen for reasons not related with their merits and their productivity, but for their connections. If an individual is assisted by their relatives to progress through the recruitment process, it is possible to speak of favouritism practices. Favouritism practice "imply that employers hire friends or relatives, even though at least equally deserving job seekers are available" (Duran and Morales 2011:2).

To conclude this chapter, it is important to investigate the application of these methods in the Italian society. Thus, social factors interact with economic factors. In fact in Italy the use of informal channels that can lead to nepotism or favouritism is quite widespread.

Baribieri (1998) established a comparison between some countries and discovered that in Italy, the role of social networks in the job searching process is higher than in France, the United Kingdom and Denmark. Sylos Labini (2004) basing his research on the final report "*Careers after high Education: a European research study*" shows that Italy ranks first in the percentage of people using social contacts followed by Spain, Czech Republic, France, the United Kingdom, Germany and the Nordic countries. From the mentioned study conducted by Pelizzari (2010), Italy emerges with a probability of 37.9% in employing social networks. This is in accordance with the findings of Ponzo and Scoppa (2008) who have demonstrated that this method is the most preferred, after participation in an interview or a selection process with private employers, where the percentage became higher for the unemployed. Furthermore, Pistaferri (1999) in his analysis on the Italian use of informal networks, analysing the data source of the SHIW (Bank of Italy Survey on Household Income and Wealth) 1990-1994, presents that informal networks are more successful than any other job search strategy and that they shorten the time used in seeking employment. "The use of informal networks as a job search method is quicker and less costly than other methods" (Pistaferri, 1999: 4).

According to different studies, favouritism practice is widespread in both the private and public sectors. Raitano and Vona (2013) in their studies established that the cause for intergenerational inequality in Italy is not the educational system but the dynamics on the labour market. In Italy, nepotism is perceived "as a cancer that has metastasized, invading many segments of society (...). Despite legislative efforts aimed at eradicating nepotism, the general perception is that the practice is alive and well" (Alesina 2011:1). Alesina and Giuliano (2007) using the World Value Survey regarding the role of the

family have shown "that strong family ties imply more reliance on the family as an economic unit which provides goods and services and less on the market and on the government for social insurance" (Alesina and Giuliano, 2007: 11). They discovered that in Italy and in the Southern European countries, in general, the family ties are strongest in comparison with northern European countries. As pointed out by Bertrand and Scholard (2006), a society based on family ties can give rise to nepotism.

With regards to the quality of employment obtained through informal methods "across the countries of the European Union, premiums and penalties to finding jobs through personal contacts are equally frequent and of about the same size." (Pelizzari 2010: 494). Nonetheless, Pelizzari in his estimates indicates "that informal search channels lead to significantly better paying jobs in Austria, Belgium and the Netherlands, whereas the opposite is true in Finland, Greece, Italy, Portugal and the United Kingdom" (Pelizzari, 2010: 496). Ponzio and Scoppa's (2008) focus is on private employment and they assert that in Italy informal networks tend to be "used by low educated individuals, in low productivity jobs, in high unemployment areas, where opportunistic behaviour are widespread and in jobs paying a wage rent" (Ponzio and Scoppa 2008: 13). These findings are in accordance with those authors suggesting that enterprises hire through informal contacts for positions that are not incisive on the enterprise performance, such as for semi or unskilled job positions in which a specific capacity is not requested. Pistaferri (1999) asserts "given education, firms may use informal networks if they need to recruit a worker with standard characteristics, but search through different channels if they wish to recruit a worker with some particular characteristics which is not easy to find through local networks" (Pistaferri 1999:10). Following this approach, informal networks and wages are negatively correlated because unskilled jobs are usually paid less. It is interesting to note that, in Italy, semi and unskilled occupational sectors are those characterized by lowest levels of intergenerational occupational.

Despite of the idea that informal channels are used for low-skill jobs, many investigations show the use of family ties lowering the barrier for entry, also in the service class, i.e. professionals and entrepreneurs. As demonstrated in the first chapter, high levels of rigidity and high levels of job transmission from parents to children also characterize these occupational sectors.

As far as professionals are concerned in Italy, they are defined as a liberal-licensed

profession. Liberal professions require an individual's attainment of a recognized degree as well as passing a licensing exam, thus a public competition. This sector is characterized by the presence of professional associations that discipline the professions, which is mandatory for qualified professionals. The impact of license and strict regulation having on the economy is a controversial issue; the issue is investigated by many authors, as well as national and European authorities for the impact on competitiveness.¹

Limitations of entry are fixed to select more qualified and talented individuals. In fact, according to Pica and Pelizzari (2011) there is a trade off between selecting high quality professionals, (improving the quality of output in the presence of information asymmetries) at the cost of limiting competition. The interesting fact, as explained by Pelizzari (2010), is that "a key feature of occupational licensing is that it is often associated with high levels of intergenerational transmission of occupations" (Pelizzari, 2010:2). Aina and Nicoletti (2013) discovered that in Italy "the odds to become a liberal professional if one's father is a liberal professional are twice the corresponding odds if one's father is not a liberal professional for both men and women. The odds ratios are even higher when looking at the transmission of specific types of liberal professions, in particular pharmacists, architects and psychologists" (Aina and Nicoletti, 2013:1). Lentz and Laband (1989) believe that the two main causes that determine the intergenerational transmission of the job are: first the transfer of occupational-related human capital; second the use of nepotistic practices. In section 2.2 the relevance that can bear the occupation-specific human capital formation within the family in achieving specific goals was analysed. Lentz and Laband (1983) explain that direct transmission of occupational-specific-knowledge is more relevant for farmers and self-employees. Aina and Nicoletti (2013) establish that liberal professions are another example of "occupation where the intergenerational transmission of skills and knowledge is important and help in lowering the entry barriers cost" (Aina and Nicoletti, 2013:2). However, they suggest that this is not the only explanation for the occupational transmission from father to children in the sector. In Italy, the chances are higher to become professional if the father is already working in the sector due to nepotism and networking. In such a case, the trade off between selecting high quality professionals, at the cost of limiting competition "disappear when barriers to entry induce a negative

¹ Indagine Conoscitiva Riguardante Il Settore Degli Ordini Professionali <http://www.agcm.it/stampa/news/3466-ic34-indagine-conoscitiva->

sorting of low productivity agents into the market" (Pellizzari, 2010: 4).

Social networks may play a relevant role in providing children with professional contacts and information that may allow an easier access to job-search networks. There can be "some kind of nepotistic practice that favours connected individuals in the examination procedure" (Basso and Labartino, 2010: 41). "Especially when established members of the profession are directly involved in the preparation and marking of the qualification exams, there are various ways one can influence them to favour one or more specific candidates" (Pelizzari et al. 2010: 6). "Children trained in the same field of study as their father or their mother are more likely to benefit from referral hiring (or equivalently, a plant is even more likely to hire one of his employees' child than some other kid in the child's class when the child and the parent share the same field of study" (Kramarz and Skans 2006:2).

Basso e Labartino (2010) analysed the role of family ties in licensed occupations using the information of the surname of all registered professionals in different occupations. Measuring nepotism through shared last names has been utilized by Alessina (2011); Durante et al. (2009) among others. Indeed the use of surname as a proxy for nepotistic relation has become relatively span. Basso and Labiritno (2010) provide empirical evidence for the presence of family links among professionals. They construct a measure of intergenerational mobility, which exploits the information contained in surnames. The indicator that they used shows the importance of one's surname and family links in defining participation in the profession and their "data show high levels of *familiarism* among medical doctors, pharmacists and lawyers" (Basso and Labirino, 2010: 56). Pelizzari has also compared the level of *familiarism* in a specific zone of Italy and the quality of the service offered, to see if the fact that relatives are in the same profession due to a job related human capital formation within the family or if family is only used to lower barriers to entry.

Moreover, most professionals are self employed and they create a network of clients that can be passed on to relatives. This again helps in lowering the entry barrier costs since it helps in shortening the time needed to set a portfolio of customers. Indeed "having a older relative already in the profession can be a powerful source of contacts for potential clients, especially at the time when the older relative retire and can pass on to the young family member his/her entire set of clients" (Pellizzari et. al., 2010). There exists cases in which these can be passed on, such as the license "mortis causa" as is the

case of pharmacy. For example, pharmacists can leave their license to their sons or daughters, even if these are not professional pharmacists. Catania and Monti (2010) explains that Italy is considerably complicated in establishing and possessing a pharmacy due to specific restrictions. "Under the Italian legislation, members of a deceased pharmacist's family who are not themselves pharmacists can take charge of their relative pharmacy for up to ten years, conditional on hiring a registered pharmacist as employee. This last provisions is particularly contradictory, since it clearly shows that professional qualifications are not essential for the ownership of a pharmacy" (Catania and Monti, 2010: 21).

It is relatively interesting to note that in the Italian regulation of the labour market, contractual arrangements that include privileged treatment to children of employees or former employees can be found. This is quite illustrative for understanding the low level of social mobility in Italy. Indeed, in many contracts a so-called "hereditary clause" exists, or existed since a few years ago, through which an individual can inherit their parent's job by contractual agreement. At parity of merits among individuals, it is given priority to employees' children in the hiring process. It is possible to find this specific clause that establishes a privileged treatment for employees' children in the recruitment procedure. Such privileged treatment can be subordinate simply to the termination of employment service or to work-related (or not) death and injuries, occasionally by renouncing to a fraction of the severance pay. Similar clauses were present in the collective contract of Rai S.p.a. 2004-2007² or Anas S.p.a. 2002-2005³. This phenomenon is also quite widespread in other important institutions. For example, the Bank of Italy among other banks prescribes in its rules that between the ones that passed the exam, that 5% of the allocated positions are reserved to the children of employees⁴. The Cosob prescribes that individuals winning the public competition, who are also children of employees, take precedence in the selection process over others who are not.⁵ These mechanisms have been explored by different Italian news magazine with

² Contratto Collettivo di Lavoro Rai S.p.a. 2004 - 2007 "Nelle assunzioni sarà tenuto particolarmente conto, a titolo preferenziale delle domande presentate dal coniuge o dai figli dei dipendenti deceduti o che siano cessati dal servizio per vecchiaia, invalidità o malattia". Source: (http://www.slc-cgil.it/wp-content/uploads/ArchivioDocumenti/Contratti/CCNL_Rai_Dipendenti%202004-2007.pdf)

³ Contratto Collettivo Nazionale di Lavoro ANAS 2002- 2005 : "Il coniuge o il figlio del dipendente deceduto o dichiarato inabile totale e permanentemente per cause di servizio ha diritto di essere assunto dall'ANAS. In caso di decesso per causa di servizio, l'assunzione avverrà a seguito del rilascio di opportuna dichiarazione da parte del dirigente competente e, comunque, non oltre 60 giorni dal decesso (-)". Source: <http://www.stradeanas.it/index.php?file/open/11075>

⁴ Trattamento normativo ed economico del personale della carriera direttiva della Banca d'Italia 2010: " Nelle graduatorie per l'assunzione dei vincitori di pubblici concorsi -salve in ogni caso le precedenza e le preferenze stabilite da disposizioni di legge vincolanti per la Banca - costituiscono titolo di preferenza la qualità, nell'ordine e a parità di merito, di dipendente o ex dipendente della Banca con riguardo ai periodi di servizio prestato; di orfano, vedovo o vedova di dipendente della Banca deceduto per causa di servizio; di orfano, vedovo o vedova di dipendente deceduto in servizio; di orfano di pensionato della Banca; di figlio di pensionato o di dipendente. A parità o in assenza dei citati titoli di preferenza, è preferito il candidato più giovane di età." Source: <http://www.fisabancaditalia.it/Contratti/Documenti/Contratto%20Direttivi.PDF>

⁵ Regolamento del personale Consob 2011: " Nelle graduatorie per l'assunzione dei vincitori di pubblici concorsi - salve in ogni caso le precedenza e le preferenze stabilite da disposizioni di legge vincolanti per la Consob - costituiscono titolo di preferenza la qualità, nell'ordine e a parità di merito, di dipendente o ex dipendente della Consob con riguardo ai periodi di servizio prestato; di orfano, vedovo o vedova di dipendente della Consob deceduto per causa di servizio; di orfano, vedovo o

some investigative reports, which revealed the use of this mechanism in both public and private enterprises.⁶ Fabbini and Rossi (1997) establish that, through a research based on national archive of the contract Cnel, the “hereditary clause” is used substantially more often than one would think. (Fabbri and Rossi, 1997: 115). The relevant point is that this clause increases the probability that an individual will search and find their jobs in plants where one of their parents is/was employed, and hence this does not contribute to improving social mobility.

The public sector, quite prominent in Italy, seems to be characterized by the use of informal methods as well. The favourable working conditions of public employment are well documented. In fact it is characterized by safer working conditions, it is assured employment until retirement, a wage rent is ensured beyond organizational performance, and so on. Due to public service attractiveness and although the access to public administration is through public concourses; parents who are concerned with their relatives' well-being may be induced to use "their positions, or insider information, or the network of relationships built up at work and, through recommendations, seek to help their children get jobs" (Scoppa, 2009:174). Scoppa (2009) estimates a model of probability of the children of public employees having an advantage in the probability of working in the same sector. He shows that "if the father is a public employee the probability of his child working in the same sector is increased by a huge 44%" (Scoppa, 2009: 167). He interpreted these findings as evidence of nepotism in public employment. An interesting consideration is that with high probability "the person in charge of hiring does not bear the cost of having incompetent workers while benefits from his gratitude" (Levine et al., 2010, 497).

A last example is the existence of family firms in Italy. Indeed entrepreneurs along with professionals compose the service class, which is one of those occupational sectors displaying higher level of transmission of occupation from father to son. Dynastic management is "the inter-generational transmission of control over assets that is typical of family-owned firms" (Caselli and Gennaioli 2003:1). Besides the transmission of a

vedova di dipendente della Consob deceduto in servizio; di orfano di pensionato della Consob; di figlio di pensionato o di dipendente. A parità, o in assenza dei cennati titoli di preferenza, è preferito il candidato più giovane di età."
Source: http://www.consob.it/main/documenti/Regolamentazione/normativa/regpers.htm?symbblink=/main/consob/Chi_e/organizzazione/regpers.html
⁶<http://www.ilsole24ore.com/art/finanza-e-mercati/2012-08-13/stipendio-padre-figlio-135025.shtml?uuid=AbIG4wNG>
<http://www.ilgiornale.it/news/interni/ritorna-welfare-allitaliana-pap-si-ritira-posto-figlio-876790.html>
<http://www.ilfattoquotidiano.it/2011/07/01/italia-peggiore-quella-del-nepotismo/134399/>
<http://espresso.repubblica.it/attualita/cronaca/2013/01/07/news/bancari-e-ferrovieri-di-padre-in-figlio-1.49650>
<http://espresso.repubblica.it/affari/2011/06/03/news/a-me-la-staffetta-non-dispiace-1.31896>
<http://economia.panorama.it/Lavoro-dove-e-ereditario>
<http://www.ilpost.it/2010/10> <http://www.ilfattoquotidiano.it/2011/07/01/italia-peggiore-quella-del-nepotismo/134399/> /19/accordo-sindacati-unicredit-figli/

portfolio of clients, as for professionals, it is also crucial for this sector the transfer of the physical capital and brand name. In fact "entrepreneurs would be more able than others to transfer financial capital to their offspring. For example sons may inherit financial and physical capital such as stock, building and machinery" (Colombier and Masclet 2006:2). LaFerrere and McEntee (2001) suggest that "intergenerational transfers would relax liquidity constraints and that transfers of human capital made within the family are important: a man is more likely to make the transition into self-employment if he has a father or a father-in-law who runs his own business" (LaFerrere and McEntee 2001:4). Fabbri and Rossi (1997) explain that this occupational class the role of education is declining. After the Second World War this figure was considerably more related to schooling. Nowadays it seems that a negative correlation exists. The formation of the entrepreneur occurs largely within the family and the familiar enterprise.

The transfer of occupational-specific human capital and "soft skills" may sound more reasonable for this sector than for others. According to Colombier and Masclet (2006) the transfer of skills and abilities is facilitate when the work place is connected to home (as in the case of farming) or when children help run the business since youth, as in the case of a shop for example. Children that receive continued exposure to the family business are likely "to pick up a working knowledge of how to run a business enterprise" (Colombier and Masclet, 2006: 2). In section 2.2 soft skills have been analysed; these are elements shaping social and relational competence such as risk aversion and these are not taught in school. As a matter of fact in entrepreneurial sectors, it is important to have specific managerial skills and abilities. Some authors support the idea that fathers that have an entrepreneurial activity are likely to transmit to their children risk-taking behaviour and this can increase the probability of becoming an entrepreneur. In opposition to this, Hiebl (2013) asserts that family firms are more risk averse than non-family firms. He adds that this depends on the family firms but that controlling family may take irrational risks to secure control over the firm.

In conclusion, the use of social contacts and family ties in the job searching process is relatively widespread in Italy. By using informal channels in the recruitment process, the probability of nepotism and favouritism is increased. These practices can be a cause of mismatch in the labour market. If there are interferences in the transition from school to work, the returns on educational investments are negatively affected. If human capital

investments are not incentivised there will be significant consequences for social mobility. At the same time these practices lead to passing on the job from father to son. In fact an individual may use the social network built around the work place to help relatives in progressing through the recruitment process. The Italian labour market is not only characterized by these unlawful practices, in fact it has been point out the existence of hereditary clause that bring to preferential treatment because of being an employee's' children rather than for merits and education achievements. In the following chapters consideration on equality and efficiency will be made.

Chapter 3

Social mobility: equality and efficiency

3.1 Introduction

The previous chapter analysed the mechanism that underpins social mobility focusing on the Italian situation. However this chapter will analyse the relation among social mobility, equality, efficiency and growth. As previously explained, social mobility is associated with movements and variations in the socio economic position of individuals in a stratified system. In fact in each society there is a sort of stratification within socio economic layers and the chance of moving across it displays social mobility.

Sociologists and economists have established a division between open and close society system. In open societies there are no institutional barriers, and hence individuals can easily move through classes. In close societies there exist barriers that do not make socio-economic positions available to all and so there are limitations in movements. On extreme levels, the main difference between a close and an open society with regard to social mobility is that in the former the socio economic status is ascribed while in the later it is achieved.

To imply that the socioeconomic status is ascribed means that it does not depend on individual achievements; rather that they are already established. Individuals' futures and roles are mostly prescribed by birth. Individuals are set in the same social class from which they originate and there is little chance of change over one's lifetime. Social positions are essentially inherited, advantages and disadvantages are transmitted and a fixed role is developed. Despite efforts, the future position occupied is already assigned. The fundamental point is that in a closed system, consideration of functional suitability is not considered. Individuals' characteristics are irrelevant in deciding the position, in determining the status and the role that they will receive. "Closed position are characterized by only being available when vacated by the previous incumbent" (Sorensen 1983: 203), as a consequence the new allocation and the new match person-

role "cannot be linked in changes in performance or the availability of more qualified candidates" (Sorensen 1983: 203).

Open societies historically display high levels of intergenerational upward and downward mobility. Individuals can move up or down the social ranking, it is possible to experience an improvement or worsening of the socioeconomic position with respect to the parents' position. The position that individuals will attain is not related to the socioeconomic condition of the family of provenience. One's social standing depends on personal accomplishments. People are ranked based on merit and achievements and their positions are filled according to competences.

The main characteristic of an open society is the absence of barriers beyond individual control, individuals are able to compete for desired outcomes and they are responsible of their future attainments. "In an open society each individual will achieve as much as his or her talent allows, without being stopped short by inherited inequalities, most notably social background" (Van Leeuwen, 2009: 399). A society of this kind is an open and meritocratic society where equality of opportunity is respected. It is clear that no societies exist that are totally open or totally closed. However, there are societies that display higher degree of openness and mobility than others. The degree of openness in a society is an indicator to understand the extent, to which equal opportunities are guaranteed in a society. Atkinson et al. (1978) point out that measures of the extent of intergenerational mobility are also relevant to assessing the degree of "equality of opportunity" or of the "openness" of a society. To have social mobility, equality of opportunity is a necessary condition. Torche (2013) explains as "social scientists consider the level of intergenerational socioeconomic association as a measure of inequality of opportunity. A strong intergenerational association indicates that socioeconomic position is closely replicated across generations" (Torche, 2013: 1). Stokey (1996) also establishes that "if economic success is largely unpredictable on the basis of observed aspects of family background, than we can reasonably claim that society provides equal opportunity (...) if economic success is highly predictable on the basis of family background, then I think it is difficult to accept the claim that our society provides equal opportunity" (Stokey, 1996:2). Intergenerational social mobility represents to what extent social origins affect an agent's unequal prospect to obtain access to a more or less advantageous social position. "In the more the positions persons hold are conditioned by their social provenance, the more rigid and closed is the class

structure; the more mobility occurs between social origin and eventual destination the more open or fluid it is" (DG Research and Innovation, European Commission 2005:12) The chapter will disentangle the relation between equality of opportunity, social mobility and efficiency, adding some consideration on the relationship among growth and social mobility. The concept of social mobility is linked to equality of opportunity, and is a significant cause of ethical concern. The absence of social mobility represents differences in outcomes due to differences at birth. Moreover, the presence of social mobility matters also for reasons linked to efficiency, as will be explained in the following sections.

The remainder of the chapter is organized as follows. Section 3.2 clarifies the difference between equality of opportunity and equality of outcome. Section 3.3 explains the importance of equality of opportunity to have efficient human capital investments. Section 3.4 deals with the concept of efficient allocation of human resource. The last section 3.5 treats the impact of social mobility on growth and that of growth on social mobility.

3.2 Equality of opportunity and equality of outcome

When making consideration on an open and flexible society it is necessary to make some consideration on the concept of equality that is strictly correlated to social mobility. Immediate intuitions suggest that higher intergenerational mobility is based on increased equal opportunity. Equal opportunity exists when "people of similar ability (broadly understood) have equal chances of success regardless of their family's social and economic circumstances" (Sorensen 2006, 368). Traditionally the concept of equality of opportunity is described as the absence of obstacles to education, occupations and so on. In a society in which equality of opportunity is promoted, individual attainment is relatively independent from social origins and the concept of individual effort assumes great relevance. Individuals of different social origins have a similar chance to succeed or fail. The extents to which rewards and positions are distributed and filled according to merit, define the level of meritocracy that is closely related to the presence of mobility within a society. Doubtlessly, if there is social

mobility and equality of opportunity is respected, it signifies that individuals can reach a determined position due to their capacity rather than ascribed factors.

Everybody begins from a different level and it would be naïve to believe that this has no effect at all on an individual's attainments. In fact someone can be more advantaged than others in achieving the most desirable social status. The family's background effects an individual's achievements, thus the extents to which social origins impact on the possibility of achieving the available social destinations, it is interpreted, by many authors, as a measure of inequality of opportunity. When economists talk about "social mobility they usually refer to the strength of (family's) influence: the higher it is the lower social mobility is." (Franzini et al. 2013: 1). A commonly shared point of view claims that "the higher the independence is from initial conditions, the greater is the equality of opportunity" (Checchi, 1997, 335).

Social mobility is often studied for investigating the existence of persistent inequality across generations. Indeed, low levels of social mobility lead to a transfer of advantages or disadvantages from a generation to the next one. If inequalities at birth undermine chances of achievement and success in later life, there is a transmission of disadvantages. "When children "inherit" a substantial degree of their economic status or other important social characteristics from their parents, this generates widespread perceptions of unfairness and lack of opportunity" (OECD, 2008: 203).

There are different reasons as to why inequality of opportunity raises concern. There are studies on its instrumental effects on efficiency. However, it is also important to highlight that inequality of opportunity is considered unjust. Brunori et al. (2013) point out that "behavioural economics has taught us that notions of fairness and justice affect individual behaviour – in the precise and well-documented sense that they induce sizable deviations from the behaviours predicted by models based on the assumption of purely self-regarding preferences" (Brunori et al., 2013: 2). If concepts of justice and fairness matters to economic agents, it signifies that distinct outcomes are judged and valued differently according to what extent inequality in outcomes is understood as fair or just. This will alter economic agents' behaviour and can likely have policy implication. As a consequence, it is important to understand the extent to which inequalities are perceived as fair or unfair.

Franzini (2010), among others, attempts to establish the fundamental difference between inequality that is acceptable and those that are not. Checchi and Peragine

(2010) mention inequality of opportunity as "ethically offensive" if it does not depend on individual choices, instead depending on personal background and characteristics outside individual choice set, however if connected with individual choices, it is ethically acceptable. The fundamental difference depends on the source of these inequalities, thus on the nature of the mechanism that generate inequalities. "In modern societies, inequality may be acceptable, but not inequality by mechanism that favour some groups unjustifiably over others" (Ganzeboom and Treiman, 2007: 10).

In the second chapter, the factors that may impede social mobility were analysed. The fundamental difference lays in the distinction between those achievements that stem from individual efforts and those achievements that depend on factors beyond the individual control, such as the socioeconomic background. It is crucial to draw a distinction between factors for which agents (in this case the children) can be held responsible and factors for which agents are not responsible. There exist differences in outcomes, resulting from conditions exogenous and independent on individual willingness. Brunori (2013) explains that inequality is due to factors beyond individual control, that Roemer (1998) called "circumstance", are unfair and unjust. Therefore should be in principle to eliminate or compensate. Meschi and Scervini (2011) summarized the existing literature on the subject, asserting that it is possible to assume a "vectorial" description of what opportunity is, and how it relates to outcome and effort:

$$O = f(e, c)$$

Outcome (O) is a function of a set of circumstance (c) and an amount of effort (e). The concept of effort can be generally understood as the set of consequences and outcome resulting from individual choices, for which agents are responsible, thus also individuals' preferences and priorities enter into account. Circumstances are always out of an individual's control. The function takes different specifications depending on the set of circumstance and the links between circumstance and efforts. If all agents have the same vector " c ", representing universal equal circumstance, there would be total equality of opportunity. Equality of opportunity gives the same outcome to individuals putting the same amount of effort; therefore ascribed factors, such as individuals' background, would have no role at all.

Brunori (2013) explains that inequalities due to factors beyond individual control (circumstance) are unfair and unjust. Therefore should be in principle to eliminate or compensate. Roemer (1993) asserts that "society should indemnify people against poor outcomes that are the consequences of causes that are beyond their control" (Roemer 1993: 147). Similarly Van de Gaer et al. (1998) find that "inequalities which arise from differences at birth are a sign of unequal opportunity and should definitely be a cause of ethical concern. There is less consensus about the desirability of further government policy to reduce inequality in outcomes, due to other factors" (:1)

Different outcomes emerging from factors for which agents are responsible, should be left intact, inequalities due to unequal effort should be considered acceptable. Individuals should not be indemnified for "outcomes that are the consequences of causes that are within their control, and therefore for which they are personally responsible." (Roemer, 1993: 147). Indeed, according to many authors, the aim of a "fair" society is not equality of outcomes, but equality of opportunities, since the final personal outcome depend on the effort that any individual exerted in the process. In fact, the idea that merit, hard work and ability should be differently rewarded is widely accepted. Roemer (1998) explains that a person is not responsible for her opportunities, while a person is responsible for transforming opportunities into outcomes.

Once equality of opportunity can be guaranteed, inequality of outcome is perceived as just and fair. Social mobility leads to justifiable differences in outcome, because equality of opportunity is respected. Despite the idea that with social mobility, inequalities of outcomes are fair and acceptable, there exists a new body of empirical evidence suggesting that a wide inequality of outcome, measured as income inequality, may negatively affect social mobility and equality of opportunity. If there is social mobility, everybody has the chance of experiencing upward mobility or downward mobility. Thus, also if inequality of income exists, the probability of being a low or high-income earner is equally shared. However, if a society displays a considerably wide inequality of income, it can become an obstacle for social mobility. The possible effects of large inequality of income on social mobility will be the treated in the next chapter.

In this section, the focus will be in creating a clear distinction between equality of opportunity and equality of outcomes. The former is undoubtedly a condition to have social mobility. If there are no barriers and each person can reach a determinate point

only depending on his ability and his capacity, social mobility is guaranteed, and since social mobility is guaranteed, inequality of outcome among individuals is considered more acceptable, to a certain extent, even desirable. Individuals have different talents, preferences, abilities and ambitions, they invest differently in human capital and acquire different skills, and thus outcomes will be different. Yet it is important that nobody will be unjustifiably denied of the possibility of achieving certain positions.

However, the second chapter discovered evidence that factors beyond individual control affect future individual's achievements. If a society displays high levels of persistence of socioeconomic status across generations, it is important to investigate the causes that generate this low level of mobility. If people employ the same amount of effort, and they reach different outcomes, especially if outcome is largely predictable on the basis of observed aspects of family background, this means that factors beyond individual control are considered. Different factors and mechanisms underpin social mobility. To discern their nature, permitted is the evaluation whether they lead to acceptable or unacceptable outcomes and if there is room for policy intervention.

Following the criteria and the function, just examined, it is possible to define whether the sources of persistence, and so the transmission of advantages or disadvantages through generations, are acceptable or unacceptable in relation to equality of opportunity. It is imperative to understand which factors are elements of the vector "c" and which are the components of "e". That is, the elements depending on individuals and the elements beyond their control. Once identified, which elements are part of "e" and which are part of "c", it is not always easy to decide which aspects can be susceptible of policy intervention.

Not all the circumstances that are beyond an individual's control can be politically addressed; there exists some susceptibility of policy intervention while there are others that cannot. Among the non-economic factors analysed in the second chapter, there are the genetic factors, individual talents and abilities. On one side, following strictly the definition of Roemer (1998), these elements are outside the individual's control and responsibility, and hence there should be compensation. On the other side, for many authors, ability and talents do not rank among the factors to be compensated for. Because these are features intrinsically linked to the person, they should be seen as something that cannot be corrected.

Other factors exist that are external to individuals' control but nevertheless, according to the prevalent modern political conceptions, intervention in this sphere would signify an invasion of the personal sphere. According to the different political conceptions, there is a higher or lower level of tolerance with regards to State intervention. An exemplificative case is the sociocultural environment, which is part of those circumstances that influence individual outcomes. It is not an easy task to decide until which point there can be political interferences. For example, customs and habits exist that characterized different cultures, these impact in many ways individual attainments. The second chapter studied the way in which the sociocultural environment, as the family and the local community, may influence individual's future attainments. The difficulty in asserting that the State can intervene in changing certain habitudes, or way of thinking just to guarantee equality of opportunity, is intuitive. There are many external factors that condition individuals' future. The family affective support or motivation that it provides, the cultural environment in which children are raised and the positive influence that well educated parents have on their children's performance at school. It is evident that it is not possible to equalize all the elements.

Furthermore, there are other aspects interpreted as unacceptable sources of inequalities, since these are beyond an individual's control, and in which political intervention is substantially more tolerated, even auspicated. There exist other non-economic, economic and institutional mechanisms, which leave room for discussion over policy interventions attempting in equalizing situations. "Among environmental factors, some are only loosely related to public policy (such as social norms, work ethics, attitude towards risk and social networks), while others can be heavily affected by policies" (OECD, 2010a: 184).

In fact, as far as the sociocultural background is concerned, there exist policies fighting segregation, or deprivation suffered by some neighbourhoods characterised by high levels of criminality, poverty and other unfavourable conditions. Policies in these sectors have an effect on the sociocultural context in which children mature. As explained in the second chapter, there exist neighbourhoods with a concentration of disadvantaged households. Residential socio-economic separations may reflect differences in school quality. The importance of education for social mobility has consistently been reiterated. Diversifying communities seems to have a positive impact on social mobility. According to the OECD's "Going for Growth"(2010b), increasing

the social mix of students "within schools could increase the relative performance of disadvantaged students, without any apparent negative effects on overall performance. Therefore, education, housing and urban planning policies that encourage the social mix within neighbourhoods could play a role in mitigating educational socio-economic inequalities and raise social mobility" (:195).

Social mobility is crucial in guaranteeing educational opportunities beyond sociocultural and economic conditions. Education is the channel designated to recognize talents and to enhance it, and furnishing other specific skills to be used in the labour market. The positive effects of education have been widely analysed in the previous chapters. As explained, income and occupation are strictly correlated with education. "In modern societies, education is the gateway to employment" (Tverborgvik, et al., 2013: 546) Investments in human capital should enhance individual ability to perform specific tasks and increase the levels of productivity that should be rewarded in the labour market. Additional education is associated to the incentive of better employment and income prospect during one's working life. Thus to have equality of opportunity in education is a crucial step. Accordingly, Meschi and Scervini (2011) believe that the role of education is functional to have equality of opportunity of both employment and income. Using the function introduced before, they expanded it as follows:

$$Y=g(e(c), S(e(c)))$$

Income (Y) is a function of circumstance (c), effort (e) and schooling (S) that also depends on circumstance (c) and effort (e). Reducing the impact of circumstances on schooling helps to reduce the impact of circumstance, i.e. factors beyond individual effort and on income. It has been demonstrated that access and academic performance can depend on family socio economic background. Education can be a channel through which inequalities of circumstance can be overcome or perpetuated. "It can amplify or reduce equality of opportunity in the labour market. Indeed, the same circumstance that we may think to affect individual income also affect individual education (...) family background play a role in determining both educational level and income level" (Meschi and Scervini, 2011: 59). According to Meschi and Scervini (2011), promoting equality of opportunity in education is a way to reduce the impact of circumstance on the labour market, because education is closely related with one's occupation and income.

As in the Becker and Tomas function, the considered variable is income. The previous chapters analysed the relation between education, income and occupation. In conjunction with investigating the role of economic background in affecting educational choices that, in turn, are strictly linked to individuals' future job positions and their perceived income. If no State intervention exists, then conditions out of the individual's control and responsibility, such as the family's income, will prevent individuals in developing their talents and abilities necessary to enter the labour market. Scarcity of resources may prevent children, coming from low-income families, to make the optimal investments. Liquidity constraints can impede long-term human capital investments, or accede to high-level schools if the access is subject to the payment of scholastic fees, or the schools are located in residential areas in which the house market is prohibitive and at the same time families cannot afford transports costs. State intervention can mediate the students' dependence on their family, financing their studies, and thus fostering social mobility. There are policy areas in which reform can aid in removing obstacles to mobility.

According to Meschi and Scervini (2011:59) "equality of opportunity in education is a powerful instrument to make societies more equal and more mobile, increasing the importance of personal effort and reducing that of exogenous circumstances". Many authors agree that equality of opportunity is a fundamental condition to have social mobility, and it should not be pursued only for reasons linked to social justice but also for reasons of efficiency. The Council of Europe (2013) analysed that intergenerational social mobility is desirable on a number of grounds. Indeed social mobility is the application of the principle of equality of opportunity and a society that rewards efforts and talents is expected to be efficient. This issue is the subject of the next section.

3.3 Mobility and efficient human capital investments

If "agents' ability vary across generations, intergenerational mobility matters for reason of equity as well as efficiency." (Schneider and Nepal, 2008: 405) Low mobility is "associated to higher injustice and higher inefficiency" (Brunetti and Fiaschi, 2010: 2). In the last chapter, few considerations were made on the existence of a trade off among

equality and efficiency. However, the idea that equality of opportunity and social mobility improve the efficiency of a country is considerably widespread.

To have efficiency, equality of opportunity should be guaranteed in the many different steps of individual life, in education as well as in the labour market, while circumstances should play the smallest role. The second chapter analysed the role of education in releasing individual prospective from those of the family of provenience. Due to new complexity in the labour market, the family cannot be anymore sufficient for endowing children with specific skills and abilities needed. Therefore formal education assumes a central role and is widely recognized for its importance to human capital accumulation in modern society.

In the neoclassical model, economic growth is driven by physical capital accumulation. Several authors, beginning with Lucas (1988), established that technological progress is driven by R&D activities. Lucas (1988) pioneered the idea that identifies human capital accumulation as the engine of growth. The new growth models introduced the concept of human capital as a productive investment. After that a critical level of physical capital is reached, economy enters a stage of sustained growth driven by human capital accumulation.

Galor and Moav (2004) explain that in the early stages of the industrial revolution, physical capital accumulation was the first source of economic growth, whilst investments in human capital were less important. According to Galor's Unified Growth Theory, that unifies the neoclassical theory and the new growth model, in the early stages of development inequality of opportunity was not considered important if there were individuals whose marginal propensity to save was high. Also without social mobility, if there were high levels of wealth, thus a segment of the society is blocked, there were no negative consequence on the efficiency and the development of a nation. Increasing aggregate savings and capital accumulation were the fundamental channel through which was possible to enhance the process of development. What mattered was the increase of wealth that supported a marginal propensity to save. Galor and Moav (2004) explain that during the first part of the industrial revolution, capital accumulation as a fraction of GNP increased, yet literacy rates remained unvaried. Educational levels requiring workers to perform their duty were minimal. Physical capital was scarce, and hence its rate of return was higher compared to the return of human capital. Wealth and aggregate savings compensated negative effects of investment in human capital. Later

acquisition of skills becomes necessary for production, and as a result the return of human capital increased. The process of development became fuelled by human capital as well as physical capital.

Schultz (1975) explains that when technological advancements occur slowly, as in traditional agricultural societies, "tradition of transferring information between generations-like parents teaching their children-are economically efficient." Schultz makes a difference between static and not static society. The difference is that the later is characterized by modernization while in the former the changes are slower. A stationary state implies zero growth and the economy may arrive at equilibrium and "the supply of resources and the demand for their service remain constant" (Schultz 1975: 831). Agricultural societies, in which people have lived for generations with the same resources, tend to approximate the economic equilibrium of the stationary state. In such societies, explains Shultz, individuals can "acquire the skills that are worthwhile from their parents" (Schultz, 1975 :832) and this is economically efficient. A society with changes in economic condition demand different abilities that cannot be passed on by parents.

Beyond the importance of acquiring basic capabilities as a minimal requirement for the functioning of a society, numerous authors support the idea that through education it is possible to discover and develop talents, to furnish individuals with intellectual instruments that will allow them to deal with new challenging circumstances. The idea is that "human capital raises individual productivity, possibly introducing positive externalities into aggregate output" (Checchi, 2006:169). Labour productivity measures the amount of goods and services produced by one hour of labour. More specifically, labour productivity measures the amount of real GDP produced by an hour of labour. Growing labour productivity is commonly believed to depend on three main factors: investment and saving in physical capital, new technology and human capital.

Through education, individuals acquire skills that allow them to accomplish more sophisticated tasks. Education raises the skills of workers in the workplace. Improvements in the educational attainment for the workforce have been a consistently important source of gain in labour productivity, and the "research and development activities of institutions of higher education have been major sources of innovation." (Bosworth, 2005: 68)

Educational attainment and labour force qualifications are viewed as a determinant of economic outcomes, not only for individuals but also for economies. An individual with a higher level of skills is likely to contribute more to production than one with a lower level of skills. High levels of productivity are expected to increase an economy's output of goods and services. Human capital creates knowledge, and it is considered a determinant of technological progress itself. In fact, it is possibly expanding scientific knowledge and transforming it into productivity, enhancing the technological progress. New technologies and ideas are critical to sustained growth. "Theories of international specialization point to human capital accumulation as another important determinant of growth in human-capital-intensive industries" (Ciccone and Papaioannou, 2006: 32). Indeed "new knowledge can augment the productivity of existing knowledge, yielding increasing returns to scale." (Kniivila, 2007: 296). Education helps creating skills that enhance labour productivity. Due to changes in society, historically there has been intensification to the importance of human capital in the process of development. Checchi (2006) studied that education promotes labour market participation. He focused on Greece, Italy, the United Kingdom, the US and Germany and discovered that "labour market participation increase significantly when it passes from less than compulsory to secondary and post-secondary education" (Checchi, 2006:7).

Moreover, through education the ability to perform a specific job increases, in conjunction with increasing the ability to adapt to the demands of emerging jobs. Esping-Andersen (2006a) asserts that "healthy and well-educated citizens are more productive, and if they feel secure they are more likely to accept rapid change" (:1). Nowadays the environment is new and trying, education prepares individuals for a rapidly changing society and to upgrade and retrain the workforce. Developed and industrialized economies are based on technology and innovations. Hassler and Rodríguez Mora (2000) wished to demonstrate that if there is a high rate of growth in a rapidly changing world, innovation follows; as opposed to one where low growth exists. As a consequence, the ability to learn is increasingly important. At high "rates of technological change, ability becomes more important than formal background" (Hassler and Rodríguez Mora, 2000: 890). The rapid technological progress leads to the increase of "the relative return to (intellectual) ability and diminish the relative return to family background" (Hassler and Rodríguez Mora, 2000: 890).

Given the importance of education for modern society, the importance of not limiting human capital accumulation is advocated by many authors. Fostering equality of opportunity in education, that is a precondition to have social mobility, is thought to have a beneficial effect on the efficiency of a country. "Even the staunchest advocates of the trade-off theory will agree that equal opportunities are important for efficiency, at least to the extent that they are pursued in the spirit of investing in a nation's human capital. " (Esping-Andersen, 2006a:1).

It has been just mentioned by Galor and Moav (2004), who postulate the existence of an early and a mature stage of development, that in the early stages of development physical capital accumulation is the first source of economic growth. In the mature stages the process of development is fuelled by human capital as well as physical capital. In their work they desired to show the importance of equality in human capital investments for economic development. Through their model they postulate the existence of two groups, the rich and the poor. As previously explained, in the early stages of development called Regime I in their model, it is not important to have equality of opportunity for economic development because it is fuelled by physical capital accumulation. In addition, if physical accumulation is not equally distributed and it is transmitted from one generation to the next one, it does not negatively impact economic development. What matters here is increasing aggregate savings and capital accumulation, also if it was owned by the same small group.

In comparison the mature stage, called Regime II, economic development depends on human capital accumulation. If the opportunity to invest in human capital is not equally shared, then equilibrium is not maximized. In fact, differently from aggregate productivity of the stock of physical capital "the aggregate stock of human capital would be larger if its accumulation would be widely spread among individuals in society" (Galor and Moav, 2004: 1003). Since human capital is inherently embodied, there are physiological constraints that limit its accumulation at the individual level. Investments in human capital are subject to diminishing marginal returns, and the aggregate is maximized if investments are widely spread.

Galor and Moav (2004) postulate the existence of three stages in the mature Regime II. In the first stage there is selective human capital accumulation. The poor consumes all of their income and are deprived from investment. If they are not engaged, neither in physical nor human capital accumulation, their descendants will be unable as well. In

this stage only the rich can invest in human capital. Development depends only on the rich for both physical and human capital investments. The poor are trapped in a zero-transfer temporary steady state equilibrium. In such a situation, investment in human capital from the poor would bring an increase in the aggregate stock of human capital. In the second stage there is universal human capital accumulation, some investments by all individuals, the poor included, are permitted. However investments are constrained by parental wealth so the equilibrium is sub optimal. In this stage "the marginal rate of return on investment in human capital is higher than the marginal rate of return on investment in physical capital for poor, whereas the rates of return are equal for rich" (Moav and Goral 2004: 1016). In the final stage, the equilibrium is maximized because there is equal opportunity and hence unconstrained investment in human capital. Investment in human capital is optimal.

In conclusion, since the accumulation of human capital at the individual level is limited and leads to a diminishing return, the aggregate is maximized if investments are widespread. Trough equality of opportunity, there are no barriers to invest in human capital and according to Galor and Moav (2004) this " has a positive effect on the aggregate level of human capital and economic growth" (:1004).

Esping-Andersen (2006a) explains that there are two "efficiency reasons" for ensuring equality of opportunity in human capital. The first reason it that due to prolonged low fertility, the coming youth cohorts are small and they will have to support a rapidly growing elderly population. Hence it is important to "invest maximally in the productive potential of contemporary youth in order to guarantee a sustainable welfare state" (Esping-Andersen, 2006a :3). The second reason has to do with the rapidly rising skill requirements in the knowledge of intensive economies. A society that does not promote equal development of human capital will reduce the number of individuals that may positively contribute to the development of the society.

If individuals are restrained from developing and enhancing their ability and skills rewarded in the labour market, there will be potential loss due to the non-optimally developed human resources. Factors beyond individual control should not influence individual educational investments in education. Suboptimal investments in human capital, resulting from a lack of equality of opportunity in education, might negatively affect an efficient development. It implies that society is under-investing in a sizable share of its children (and possibly also over-investing in some). There is "a cost to the

economy and society if children from low-income families do not have anything close to the opportunities to develop and use their talents as the more fortunate kin from better off families who can attend better schools, receive college prep tutoring (...)" (Krueger, 2012: 6). Inequality in human capital investments prevents "talented poor to undertake profitable investments, thereby limiting the full potential for the growth of the economy" (Piketty, 2000: 440). As a result, resources may not flow where returns are highest. There can be highly capable children that may fail to complete primary school, whilst others less able may finish university.

Efficiency would require all individuals with similar characteristics to make the same investment (Piketty 2000). There are higher "increasing returns in not hampering potential high-productive individuals. The aptitudes and abilities of everyone in society are more likely to be used efficiently, so promoting both growth and equity" (D'Addio, 2007: 11). A society that optimizes its investment in education is considered an efficient society. If different schooling's choices derive from differences in talent endowments, there is no reason to intervene. Once that equality of opportunity is respected, so that each individual chooses their path and makes the coherent effort to reach their aspirations, there is no inefficiency. Investment in human capital is optimal whatever the outcome. A difference in outcomes, that is, an inequality of outcomes is a natural consequence of mobility and does not have an effect on a country's development, contrary to inequality of opportunity. In contrast, if different levels of education is the outcome of circumstance beyond individual responsibility, such as income inequality between families, then "redistributive policies are both equity - and efficiency enhancing" (Checchi, 2006:27)

To conclude, equality appears to be important in reaching an efficient point for human capital investments. In fact, investment in human capital increasing individual productivity has been a positive impact on growth. According to Piketty (2000), by allowing a "larger number of able children and entrepreneurs to educate and invest, raise the intergenerational mobility of earnings and increase output at the same time" (:440). Depending on the degree of investment and the level of effort, the agent will develop their capabilities and acquire a specific efficient unity of labour. At this point it is fundamental to have social mobility and equality of opportunity also in the labour market, meaning that the allocation of human capital in the labour market has to be suited according to individuals' productivity. External circumstance such as family

background, considerations beyond individual productivity and capacity, should have no role at all to guarantee an efficient allocation of human resources.

3.4 Mobility and efficient allocation of human resources

Equality of opportunity concerns not only efficient investments in human capital that lead to higher individual productivity. Once that equality of opportunity in human capital accumulation is guaranteed, leading to the point of optimal investments, it is fundamental that equality of opportunity is respected also in the passage from school to work. Circumstances, such as family background, should not be considered in the labour market selection process. An efficient allocation of human resources is ensured if there is social mobility. Investments in human capital endow individuals with a specific unit of productivity. A flexible society will permit efficient allocation of such individuals to the correct job position according to their specific unit of productivity. In turn, this will incentive human capital investment leading to improved efficiency.

Equality of opportunity in the labour market means that it is not unreasonably denied the possibility to individuals in reaching greater in more a desired position. It means that individuals will have the possibility of changing an occupational position compared to those of their parents, that there are no barriers to the entrance of particular jobs among those that impose additional requirements in terms of training programmes and human capital (Bortolotti e Fiorentini 1999). If specific qualifications are needed, and equality of opportunity in educational investments is respected, those additional requirements will not inefficiently restrain the entry into the market. There are no "barriers to career choice, individuals are free to choose the option giving maximum expected lifetime utility" (Hassler e Rodríguez Mora 2000, 889).

Joel Spring (1976) defined the educational system as the "sorting machine". Students move into a labour force position where stratified levels are correlated with levels of educational attainment. Kerckoff (1995) uses the sorting machine metaphor to refer "to both educational and labour force mechanisms that serve to channel individuals toward adult positions in the stratification system." (Kerckoff 1995: 324). Accordingly,

Bernardi and Ballarino (2010) find that higher educational expansion provides credentials that facilitate the matching between labour supply and demand, regardless of social origins.

In an open and flexible society, in the selection procedure for specific jobs, people are chosen for their capacity, merits and their level of productivity. Considerations connected with family background are not considered. Once individuals invest differently in human capital accumulation, job positions are filled according to individuals' skills and merits. Employers are expected to recruit the most productive individuals. Select those individuals that are expected to best fulfill the task of a specific job. Agents will be the masters of their own destinies because their achievements will depend on his aptitude and efforts. Consequently there will be an efficient allocation of human resource. Therefore children born in low socioeconomic status will have the possibility of moving upward. Vice versa for children born from high occupational status parents, if they do not owe the same skills and ability of their parents, they will experience occupational downward mobility leaving the working position to more deserving individuals.

However, it has emerged that consideration not connected to individual productivity may enter into account in the selection procedure. Family background can be considered also into the process indirectly, i.e. through educational investments, but also more directly. As investigated in the second chapter family, connections and social networks may interfere in the labour market entrance. It has been demonstrated that family ties can make the access to the labour market easier, such as individuals acknowledging a reservation for a job position. Relatives may not be used only as a source of information, however also as a direct way of entrance into the labour market. Family may "simply help reducing the idiosyncratic component of the entry barriers, either through legitimate support in accessing jobs and clients or by less legitimate nepotism or corporative practices or even through plainly unlawful favouritism in the qualification exam" (Pellizzari et al. 2011: 61) Empirical research "show that family ties are indeed important for transition from school to work, in particular who tend to follow their fathers" (Kramarz and Nordström Skans, 2006: 2). Family ties may interfere with a genuine process of worker selection, favouring people with connections over more talented workers; this means that they are preferred for reasons unrelated to productivity (Ponzo e Scoppa 2008).

Nepotism is defined by Becker (1957) as a "discrimination in favour" that himself defines as little distinguishable from "discrimination against" since "the social and economic implications of positive prejudice or nepotism are very similar to those of negative prejudice or discrimination" (Becker, 1957: 7). Members of their own group are "treated favourably respect other anonymous players" (Fershtman et al. 2002: 4).

If a person is interested in the wellbeing of their familiar, they may use in the process of worker selection non-meritocratic criteria. Favouritism practices are also explained as resulting from an externality in the agent utility function. Individuals in charge of recruitment may decide to hire some relatives also in important positions instead of hiring more talented individuals for non-economic reasons. This may create utility for him, since people care for their relatives and receive utility if they find employment. "Connected workers could be selected as an exchange of favours or loyalty or mainly for "altruistic" reasons and, as a consequence, individuals hired through informal networks might be characterized by lower productivity" (Ponzo and Scoppa, 2008:2).

Bertrand and Scholar (2007) assert that family values may be considerably relevant in shaping the organization of businesses and their efficiency, as a consequence "suboptimal economic organizations can emerge when parents put too much weight on keeping the business in the family, maybe due to a strong sense of duty towards other family members or a more selfish desire to turn the business into a family legacy." (Bertrand and Scholar, 2007:76). These mechanisms are found to be not profit maximizing. The main problem is the mismatch between workers' occupational choices and their productive advantages. Many researchers establish that connections between family ties and recruitment often generate a negative impact on productivity, by cause of hiring less talented workers (Ponzo e Scoppa 2008). If this is the case "meritocracy fails and the firms hired the 'wrong' workers in that sense, with the end result of output not being produced at the lowest cost, that is, x-inefficiency" (Levine et al. 2010, 498).

Many literary works exist in studying the phenomenon of family dynasties in firms, focusing on the effect on efficiency in passing on the enterprise managements. Wilson et al. (2013) list many different reasons in support of the idea that family firms perform better than non-family firms. For example, it is possible to build a long-standing relationship with trading partners, there can be better alignment of interests, and relatives may avoid choices that carry significant risk of financial losses because family

wealth is strongly linked to the firm performance. Nonetheless, a large literature describes the negative aspects and effects in passing on firms. Some recent studies analyse the role of nepotism in firms' performance and whether this lead to efficiency or is only an outcome of social dynamics that might be costly for economic outcomes. "Nepotism is often cited as an explanation for the intergenerational transmission of management in family firms, which prevails in most countries." (Scoppa, 2009: 169). Schulze et al. (2003) explains that relationships in family firms are "embedded in the parent–child relationships found in the household, and so are characterized by altruism" (Schulze et al. 2003: 473). Altruism and the desire to maximize family welfare may influence business practices and compel the family firms' CEOs to take actions that create costs. "Altruism reduces the CEO's ability to effectively monitor and discipline family agents (...); it systematically biases the CEO's perceptions, and hence the information that they filter and process about employed children. Moreover, altruism reduces the effectiveness of a CEO's supervision (...)" (Schulze et al., 2003:478). As a consequence there can be damaging effects. If family firms "appoint family members regardless of their ability, rather than recruiting non-family members who do have the skills, they expose themselves to costly-to-mitigate adverse selection problems". (Wilson et al. 2013:6). Accordingly "social networks can lead to low labour force quality, low returns to firms' investment, and depressed aggregate productivity" (Bentolila et al., 2008: 1). If, for efficiency's sake, an individual may decide not to hire a relative instead of a more talented worker, this consideration may not arise if the person in charge of the recruitment process is not affected by the enterprise performance. This may be the case of public employments, in which often is "the person in charge of hiring does not bear the cost of having incompetent workers while benefits from his gratitude" (Levine et al., 2010: 497).

Job positions in a functioning and efficient system should be filled due to skills and merits. Anonymity rules or procedures should be used in selecting the appropriate worker for a position (Fershtman et al. 2002). They should be suited to establishing the educational profiles and to evaluate the quality of the applicant. To have an efficient market, competition should be open to all. Sorensen (2006: 369) "by equal opportunity we think of a situation where everybody in society is offered opportunities to compete and be judged according to the same rules and standards." Meritocratic-criteria of selection have to be used to fill the job positions. Job applicants are heterogeneous with

respect to their productivity and they should be allocated in a way that maximizes individual productivity.

Moreover, a market with non-transparent or non-meritocratic procedures of selection reinforces immobility and stratification. The conclusions drawn by some authors is that due to the existence of barriers to occupational entry individuals often have no choice but to remain in their father's occupations involuntary, with the implicit suggestion that they suffer some sort of loss in the process. Intergenerational occupational mobility may remain low because "workers seek to use their inherited social connections to find jobs more easily jobs in which they are not necessarily more productive" (Bentolila et al., 2008: 6). Frequently the socio-economic conditions, such as economic depression, may have a certain influence on the kind of an individual's decision. Due to socio-economic conditions, the opportunity of seeking employment more easily may convince a worker "to undertake a career in professions, sectors, or locations where his abilities are not fully exploited" (Bentolila et al., 2008: 33). This means that some workers face a trade-off about using their family's connection to enter the labour market, following the parents' footprint and selecting the occupation in which they would be most productive. According to Loury (2004) "there are productivity gains to be had from improving the match between workers and jobs" (:1323). Promoting intergenerational mobility "appeals to the widespread belief that everyone should have the same opportunities in life rather than make the same choices and achieve the same outcomes irrespective of preferences and behaviour" (D'Addio, 2007: 11). Murphy et al. (1990) explains that when people are free to choose their occupation they will choose the job position that offer them the highest return on their abilities. If they do not occupy the correct position, talented people do not improve technological opportunities, the rate of technological progress lowers and the economy stagnates (Murphy et al., 1990). If there is mobility, individuals are likely to be more productive since there is a correct allocation of human resources in the job structure.

An efficient allocation of human resources is supposed to have a positive effect on a country's economic development. "Selection on the basis of talent is necessary condition for economic development" (Cutright, 1968: 403). Murphy et al. (1990), among the possible explanations given to explain the U.S. productivity growth slowdown, gives an explanation that the "human capital is allocated improperly for growth" (1990:34). He highlights the importance for growth, of allocating the most able

people to the productive sector of the economy. He believes that "meritocracy is an obvious attractor of talent" (Murphy et al 1990:15).

According to the report of the Council of Europe 2013 "society where talents and hard work are rewarded is efficient because individual talents and aptitudes are more likely to be applied and allocated where they can have best impact. This means that social mobility may be good for economic growth" (:79) Different individuals have "different aptitudes with regard to creating ideas and finding better ways of production. The extent to which society can take advantage of this depends on the efficiency of the social sorting mechanism" (Hassler and Rodríguez Mora, 2009: 903). Social fluidity is believed to increase efficiency.

On the contrary, if there is no social mobility, people are likely to be misallocated and might be drawn out of the activity in which they maximize their productivity. Talents will be wasted because there will be no opportunity of putting them to full use. This will lead to a sub optimal economic efficiency. The idea is that "when exogenous circumstances play a strong role in determining individual occupation prospects, there is a suboptimal allocation of resources and lower potential for growth" (Peragine et al., 2013: 3).

Inefficient allocation of human resources imposes significant costs, negative externalities, on all members of a society. Indeed, inefficient allocation means that the returns to educational investments are not adequate. As a consequence, those who invested in human capital accumulation might be unjustifiably refused and inappropriately rewarded. Contrarily, undeserving individuals with fewer talents may recover important job positions. In a competitive labour market in which wages reflect the marginal product of workers, to be able "to command higher earnings, the better-educated or more-trained workers must be sufficiently more productive in employment than their less-skilled counterparts. Note, however, that in the presence of imperfect competition or of barriers to entry into different occupations, wage differentials between the qualified and the unqualified may not necessarily be related to productivity differentials" (Blundell et al., 1999:3).

Individuals invest in education because it raises their productivity. At the same time, the amount of education is positively correlated with earnings. Further education is associated with higher expected income. The wages have to be paid according to productivity gains. People invest in education because they assume that sufficiently

higher future earnings will compensate the costs. If there is an inefficient allocation of human resources, then there are no adequate returns to individuals' human capital investments and this negatively affect human capital investments' decisions. The second chapter analysed that, along with liquidity constraints, low return to educational investments is among the causes that limit human capital investments, especially by those coming from disadvantaged conditions. If investments are not adequately rewarded, low socioeconomic families will hardly assume the risk. Educational choices are investment decisions, where current income opportunities are renounced in exchange for better income prospects in the future. If there are inappropriate returns to education human capital, investments won't be incentivised.

If there is no social mobility in the labour market, then consequentially individuals coming from different backgrounds, despite similar effort, do not have an equal chance of reaching a specific socioeconomic position. It is a rational mechanism the internalisation of these differences, when making an investment decision in the present. If there is no guarantee that individual skills are allocated over jobs in a way that maximize individual potential, individuals do not supply their efficient unity of labours in a competitive and meritocratic labour market. If an individual coming from a disadvantaged family expects, despite his efforts, a lower return to education in comparison to people coming from more advantaged families: the amount of schooling he will choose will be less than that for an otherwise identical individual. If there exists such kinds of inefficiency and inequality, an individual's aspiration will be frustrated and this reduces the motivation in investing in human capital. In this case there can be a sub-optimal investment in human capital. This will foster the socio economic status persistence across generations and it is likely to have adverse effects on the overall efficiency. "Lack of equal opportunity may affect the motivation, effort and, ultimately, the productivity of citizens, with adverse effects on the overall efficiency and the growth potential of the economy" (OECD, 2010a: 184).

Furthermore, if there are low levels of social mobility, socio economic positions are largely predefined, regardless of an agents' effort, there is less incentive to invest in education also from those who have the resources to make such investments. The incentives to invest in human capital are clearly reduced for individuals belonging to both high or low socio economic positions. This can hinder economic development. If initial conditions have far greater relevance than individuals' efforts, then there is no

room for flexibility. On the contrary, the outcome is a highly stratified society, where the advantages and disadvantages are inherited and transmitted across generations. If the society is a rigid society, then it is characterized by low intergenerational mobility and inefficient use of talent. (Anderberg and Andersson 2007)

Additionally, if the competitive allocation is efficient it provides socially optimal incentives to invest in human capital. If there are jobs that guarantee an adequate return to human capital investments, people will feel more secure to invest in education. Societies that remove barriers enabling individuals to reach any position regardless of conditions beyond their control, enhance motivation and incentives. "The intergenerational transfer of social position inhibits the allocation of talent to social tasks in the labour market through selection by merit and meritorious selection provides appropriate incentives to reward effort, application and talent." (Council of Europe, 2013:7). These will incentive human capital investment that, in turn, increases individual productivity.

To be a protagonist of the world economy, the young have to fully realize their potential independent from social origins, and hence give a contribution to society. The European Youth Pact adopted by the European Council in March 2005 aimed at reaching full occupations. Among its guidelines: expansion of investment in human capital, adjustment of education in response to new skill requirements, enhancing mobility, flexibility of the labour market, improvement in the matching of labour market needs, ensuring that knowledge matches the needs of a knowledge-based economy. In the Labour market, development in Europe 2013 considered the labour market challenges and trends and it displayed an overall negative trend, predominantly driven by a growing skills mismatch, indicating that the lack of labour market opportunities associated with the economic crisis is producing hysteresis effects which need to be counteracted by investments in human capital and more effective matching.

3.5 Social mobility and growth

This chapter will constantly merge the relationship between social mobility, equality of opportunity, efficiency and growth. However, the relation between these factors is not unanimously accepted. The chapter investigates the arguments proposed by numerous

authors about the fact that social immobility in conjunction with the disrespect of equality of opportunity will lead to different inefficiencies in the system that, in turn, hinder growth. If intergenerational persistence generates inefficiency, then it follows that "appropriate corrective policies can raise intergenerational mobility and output at the same time" (Piketty, 2000: 435). However, there are some authors suggesting that there is a trade-off between equality and efficiency. Therefore measuring in favour of social mobility across generations would generate potential output losses (by affecting other drivers of growth). The relationship among growth and efficiency is rather complex, and this complexity will be made apparent in this section, in addition to the last chapter where considerations on the existence of an inclusive growth are made. The famous text of Arthur Okun "*Equality and Efficiency: the big trade-off*" sustains that the promotion of equality leads to a payment of some costs in terms of efficiency. Social and political rights, distributed equally, affect the functioning of the economy. Efforts to promote equality are interference and they "are rarely costless (...). Efficiency is bought at the cost of inequalities in income and wealth." (Okun 1974: 51). If there is a real trade off, then there will be a necessity in deciding among growth-oriented political decision or decisions aimed at enhancing mobility. Some measure in favour of mobility, in requiring to be "weighed against the possibility that some measures in favour of social mobility also entail potential output losses by affecting other drivers of growth (for example, certain redistributive policies such as progressive labour taxation can adversely affect labour utilisation or productivity). This suggests that a careful balance must be struck between growth-oriented policies and those that enhance mobility across generations" (OECD 2010:185).

The *World Bank Report 2006* states, "the dichotomy between policies for growth and policies specifically aimed at equity is false" (p. 10). On the contrary, the pursuit of equality of opportunity, that is a fundamental precondition to have social mobility, is not only intrinsically desirable, but could, if appropriately pursued, enhance economic efficiency.

However, Roemer (2006) explains that often is the term 'efficiency' used to define social efficiency in the utilitarian sense. Social efficiency defines the allocation (or policy) maximizing the social objective function (in this case equality). In the utilitarian sense, it follows that a policy is efficient if it is impossible to find another policy that engenders a larger GDP per capita (or a faster rate of growth of such). So efficiency as

‘social efficiency in the utilitarian sense’ means, "pursue equality maximizing GDP per capita or its growth rate" (Roemer, 2006: 240). He suggests that this is an opportunistic explanation, meaning that if one disagrees with the view that equality is a right ethical political posture to adopt, "he should support equity-improving policies because these maximize GDP per capita." (Roemer, 2006: 237)

Roemer (2006) explains that reducing imperfection is in everyone's interest or it is Pareto improvement. A policy (as is in our case) is defined as Pareto Efficient if it is not able to find another policy that increases the welfare (or the advantage, or the opportunity for advantage) of all. He points out that adopting policies that reduce inequalities "might well improve equity, and as well might improve the rate of growth of GDP, but it also might not be a Pareto improvement, in the sense that the wealthy would suffer"(Roemer, 2006:241). As a result he says that a correct and honest statement of the view would be "maximizing equity is important as an end in itself, and probably the sacrifice in GDP per capita that would be endured by doing so is quite small." (Roemer, 2006:238)

Bourguignon et al (2006: 236), in contrast to Roemer, explains that when it is said that an increase in equality leads to an increase in efficiency it is meant as "economic efficiency", that is slightly different to Pareto efficiency. Economic efficiency means the achievement of the largest possible value of output (or advantage, for this analysis) given a production possibility set" (Bourguignon et al 2006: 236). Statistically, economic efficiency coincides with Pareto efficiency for particular distributions of aggregate advantage. Yet the two concepts "differ when used to assess movements from an initial vector of advantages A to another vector B. The move from A to B is Pareto efficient (or ‘Pareto-improving’) if and only if no person is worse off at B than at A, and at least one person is better-off. Our concept of economic efficiency requires only that overall aggregate advantage be higher in B than A." This signifies that in moving from A to B there can be some losers. Bourguignon (2006) suggests that it might, therefore, be termed as the Kaldor-Hicks efficiency, since the Kaldor-Hicks criterion differs from the Pareto criterion exactly in that it requires only that it be possible for a social planner to compensate any losers in the move from A to B, rather than that there are no losers. An outcome is considered more efficient if those that are made better off could, in theory, compensate those that are made worse off. The Kaldor-Hicks test effectively

approves a move from allocating A to B if the 'size of the pie' is larger in B than in A. This is the concept of economic efficiency adopted also by the World Bank.

When suggesting a positive link between equity and efficiency, in the *World Development Report* (2006) it is admitted that there may be a short run trade-off between equality and efficiency. Equity is perceived as complementary to the pursuit of long-term prosperity. Long-term prosperity is best achieved by fostering economic growth and broad participation in that growth. "Greater equity implies more efficient economic functioning, reduced conflict, greater trust, and better institutions, with dynamic benefits for investment and growth" (World Bank 2006:3). The report explains that equality can be perceived as a goal of intrinsic importance, however societies "where all members have similar chances to become socially active, politically influential, and economically productive — contribute to sustainable growth and development"(World Bank 2006:3). A broad sharing of economic and political opportunities is instrumental for economic growth and development.

Additionally, the report from the OECD (2010) "*Economic Policy reforms: Going for Growth 2010*" establishes that some measures in favour of social mobility may entail potential output losses and it is important to find a balance. However, "policy reform can remove obstacles to intergenerational social mobility and thereby promote equality of opportunities across individuals. Such reform will also enhance economic growth by allocating human resources to their best use" (OECD, 2010: 181). Obstacles to social mobility should be advocated on equity grounds and on efficiency grounds. Indeed, as investigated, less mobile societies are likely to waste or misallocate talents. Secondly, if there is no mobility then it can affect motivation as well as human capital investment decisions, and consequentially affecting individual productivity.

The Council of Europe (2013) also asserts that intergenerational inequalities "undermine the conditions in which efficiencies are generated" (Council of Europe, 2013: 24). Intergenerational social mobility is described as something desirable on a number of grounds. First of all it signifies for the application of the principle of equality of opportunity. Secondly, if social mobility exists then different outcomes are accepted. Thirdly, a society that rewards talents is efficient. Fourthly, an immobile society may suggest a divided society and this is a negative condition for growth. More equitable societies develop better institutions, which in turn make the societies more prosperous.

Substantially more complicated is the relationship between growth and mobility, so if higher rate of output fosters mobility. Proponents of the industrialization thesis find that social mobility increases with industrialization and economic development (Lipset and Zetterberg, 1959; Treiman, 1970; Treiman and Yip, 1989). With industrialization many transformations took place that led to changes also in the social stratification of societies. As explained in the first chapter, the process of industrialization implied a considerable degree of occupational mobility, as new positions were generated alongside the disappearance of others. There has been more opportunity for mobility to those who were agricultural labourers. In fact, one of the initial effects of industrialization has been the large population movement out of agriculture. There has been a decrease to the proportion of labour force engaged in the agricultural sector and shift in the distribution of the labour force. Thus there has been a proliferation of new job positions. Industrialization has been a process of innovations, output expansion that created new opportunities in the labour market.

Lipset and Zetterberg (1959) have been among the firsts to investigate the effects of industrialization on intergenerational social mobility. In truth, they were actually concerned with absolute mobility rates and not relative mobility rates. The first chapter distinguished the distinction between the two concepts. "Openness is mobility that is not due to changes in occupational structure" (Van Leeuwen 2009:401). Absolute mobility may increase simply because of the social structure changes, "relative mobility is measured net of such structural changes"(Dribe et al. 2012:3). However exist many authors suggesting that industrialization and economic development increases relative mobility and encourages equal opportunities. Treiman (1970) conceived one of the first important works concerned with both absolute and relative rates of mobility in relation to the changes brought by industrialization and growth.

Generally economic development leads to a more complex and differentiated labour market, thus to the exigency of increasing individual knowledge and specialization. Treiman, dealing with the effect of industrialization on social mobility, explains that industrialized nations are more likely to have free mass educational system because "shifting labour market crates increased demand for trained personnel" (Treiman 1970: 218). Changes in the occupational structure have been a cause of the increase in the level of education in the population. As nations eventually industrialized, the occupations required higher levels of specialization, and this is obtained through formal

education. Industrialized countries reduces the "dependence of educational attainment upon social origins, since educational opportunities are more readily available to urban children and since there is less pressure upon the children of urban industrial workers to leave school at an early age to go to work" (Treiman, 1970: 218). Kerckhoff (1995) establishes that the vast majority of industrial societies have introduced some form of educational reform during the twentieth century that has had one of its goals as loosening the origin-educational attainment association. Additional extensive education, proper of more industrialized countries "operate to break down the rigidity of the class structure of traditional society, and thus to increase the ease of mobility" (Treiman 1970: 218).

According to Breen (2004) "in general, the increasing complexity of modern labour forces and the shift in the occupational structure towards industrial and then to service employment should also weaken the tendencies towards direct inheritance of class position." (Breen 2005:48) Developed and industrialized economies are based on technology and innovations. "Technological changes tend to radically transform the nature of specific jobs and to give rise to entirely new occupations as well" (Treiman, 1990: 216). As a result, new requests for specializations lead to an increase in the role of education. Occupational skills, other than skills passed on in the family, are required. At high "rates of technological change, ability becomes more important than formal background"(Hassler and Rodríguez Mora, 2000: 890).

Duncan (1967:429) asserts that as societies industrialized, the importance of achievement processes, i.e. the influence of respondent's education relative to that of parental characteristics, increases, and the importance of ascriptive processes, i.e. the influence of family background, decreases. The modernization hypothesis consistently "predicts that the impact of the family on educational attainment and occupational status will be smaller and that the effect of educational attainment on occupational status will be larger in technologically advanced societies" (Sieben et al., 2001:443).

The idea is that industrialized or 'modernized' societies with intense economic competition and development will require employers to recruit individuals for particular job positions on the basis of meritocratic or achieved, rather than ascribed, characteristics. Rapid growth based on innovation and technology creates an environment in which the sorting of individuals is based on their capacity and not on their social background. The division of labour eventually became more complex, the

level of competition increased, and therefore the job positions should be filled according to the skills and training of the applicant. In fact, preference should be expected for the best person for the new job.

High growth rates reduce the importance of the transmission of social advantages from parents to their children, thus making individuals compete on more equal grounds. (Hassler and Rodríguez Mora 2000). Rather than family origin, personal intellectual abilities should determine educational and occupational outcomes. Achievement that is more desirable than ascription should increase with economic development whilst ascription should decrease with economic development (Ganzeboom and Treiman 2007). Education, occupation and income became more dependent on educational achievements.

"Economic growth - meaning a rising standard of living for the clear majority of citizens - more often than not fosters greater opportunity, tolerance of diversity, social mobility, commitment to fairness, and dedication to democracy" Friedman, 2006: 15. In periods of major "technological progress there is a decline in relative importance of initial-parental environmental conditions (the driving force behind the persistence of inequality) enhance mobility and generates a higher concentration of better-educated individuals (...) stimulating further technological progress and future economic growth" (Galor and Tsiddon, 1997: 364). It results as a reinforcing circle in which growth requires more investment in human capital and efficient allocation of human resources that, in turn, positively affect growth.

Yaish and Andersen (2012) present the existence of a cross-national variation in the association between the occupational status of respondents and their fathers. Their finding is that "consistent with the industrialization thesis, this variation is positively associated with per-capita GDP, suggesting that more affluent nations are characterized by more open and fluid stratification structure" (Yaish and Andersen 2012: 527). However, as will be analysed in the next chapter, a number of authors turn their attention to the impact of certain distribution of wealth may have on social mobility in affluent nations. Furthermore, the first chapter presented the existence of various theories about the general trend followed by industrialized nations.

To conclude, whereas industrialization undoubtedly transformed economies across the globe, it is still debated whether industrialized societies are simultaneously more open, i.e. characterized by a greater amount of relative social mobility as opposed to

unindustrialized societies. An abundance of empirical studies have coherently demonstrated an increasing rate of absolute mobility, whilst its influence on relative mobility remains debatable. "It may be the case that industrial societies are not more open, in the sense of having more equal relative mobility chances" (Maas and van Leeuwen, 2002: 179). Indeed, the first chapter elucidated that despite industrialization some countries, including Italy, continue displaying low rates of relative mobility. Maas and van Leeuwen (2002) in their study on industrialization and intergenerational mobility presented the case of Sweden where intergenerational mobility was higher during industrialization than ever before, and that "mobility stopped increasing at the same time as industrial development began to stagnate" (Maas and van Leeuwen, 2002: 1990). However, they had hoped to better analyse the unresolved issue regarding the relationship between industrialization and intergenerational mobility, subsequently discovering that "industrialization did not unequivocally lead to weakening mobility barriers, but instead to the replacement of certain barriers by others". Bourdieu and Passeron in *"Reproduction in Education, Society and Culture"* (1990) analysed how the powerful elite secure the upper echelons of society for their own offspring.

In modern societies, social position is rarely directly inherited, yet at the same time it is not exclusively meritocratic. In fact, a number of non-economic, institutional, economic and social factors exist that can provide obstacles for the complete independence between background and destination. The final chapter will coherently explore numerous studies suggesting that the widening inequality of outcome, amongst various members of society, may possibly interfere with the equality of opportunity and social mobility. In addition, the Italian case will be investigated.

Chapter 4

Intergenerational economic mobility and inequality of income

4.1 Introduction

The previous chapter drew a division among equality of opportunity and equality of outcome, explaining that if equality of opportunity is respected, social mobility is guaranteed and inequality of outcome is justified. The relation between equality of opportunity and efficiency has been thoroughly investigated. It is generally believed that equality of opportunity and social mobility will improve countries' efficiency, whilst the effect of growth on social mobility is controversial.

It is well documented that growth alone is not a reliable index to evaluate the economic performance of a society. There is no such evidence that states that there is a universal benefit that comes with growth, it does not automatically address the social problems. A number of economists have been interested in explaining the limits of GDP as an indicator of economic performance and social progress (Stiglitz et al. 2009). It is an aggregate that measures the total economic production for a country. As investigated, growth can create new opportunities; however the existence of social mobility is crucial in the insurance that all members of society have equal chances to take advantages from it.

Growth without mobility means that the positive effects of positive output are probably offset and it would likely reinforce inequalities and the channels that hamper social mobility. A poll by the BBC in February 2008 suggested that there is an even stronger view that the benefits and burdens of “the economic developments of the last few years” have not been shared fairly. Majorities in 27 out of 34 countries hold this view – on average 64 percent. The perception that the benefits and burdens of economic development have not been fairly distributed is considerably high in Italy (84%). If there is social mobility, then there is broad participation in that growth. It means that equality of opportunity is respected, hence everybody will have the same chance to reach any socio-economic position and any occupational status regardless of their

family's background.

The previous chapter focused on the sources and the mechanisms from which inequality of outcome originates from, creating a distinction that makes it possible to distinguish among what Franzini (2010) refers to as acceptable and unacceptable inequality. Franzini (2010) explains that similar inequality from a quantitative view can be differently accepted. The source, from which different outcomes stem from, is what makes a difference in judgment. The degree of acceptability depends on the nature of the mechanisms that generate inequality. Indeed, if equality of opportunity is respected, inequality of outcome is far more tolerated. Differences in outcome coming from different efforts are justified and considered fair. "Meritocracy justifies both high rates of social mobility and a great degree of social inequality" (Van Leeuwen, 2009:400). Although the presence of social mobility causes the inequality of outcome to be substantially more fair, it can be considerably interesting and useful to analyse how distant these outcomes can be and if the extent of inequality in outcomes has, in some way, an impact on social mobility. Doubtlessly this chapter will analyse the relation among social mobility and inequality of opportunity from another point of view. Despite social mobility making the inequality of outcome, as inequality of income, much more acceptable, there are some studies suggesting that beyond a certain point inequality of income may negatively affect social mobility. Wide inequality of income can create obstacles to equality of opportunity. It can reinforce the strength of those factors hampering social mobility. To support this idea, there exists a number of empirical studies demonstrating that unequal countries appear to also being the least socially mobile.

Inequality of outcome is concerned with the relative position of different individuals within a distribution; different members of a society in possession of various degrees of commodities valued by all or most members of a society, such as income. Viewing the distribution of income in a society is a traditional way to analyse different outcomes among members' of a society. To measure the income distribution is to analyse that the gross domestic product is distributed amongst a population. Inequality of income presents the differences between each member of a society from the average. The chapter analyses the wide disparities between the top and the bottom levels of society and how such might negatively impact social mobility.

When the link among inequality of income and social mobility is analysed, social

mobility is considered in its economic aspect. The relevance is that intergenerational income mobility can be easily correlated with other microeconomic variables, such as the income inequality within a society. The dissertation gave greater attention to occupational mobility; however the link between occupation and income (or earning) is not problematic. In fact, as constantly made apparent, the two concepts are obviously correlated, since income largely depends on the job position the individuals occupy. Intergenerational income (or earnings) mobility shows the amount in which children's future earnings depend on the earnings of their parents. Occupation, in a market economy, is considered a main factor affecting individual's position in the social stratification and is considered as a considerably comprehensive indicator to proxy the socio-economic positions. Furthermore, due to scarcity of datasets containing information on individuals' income, job position is used to proxy individuals' earnings, strengthening the relation between these two indicators. Measuring intergenerational social mobility through income rather than through occupation is substantially more recent. As a consequence, increasingly fewer long series of data exist. Italy is notably characterized by limited availability of data and this "lack of data has constrained previous studies to focus on measures of "socio-economic" condition such as occupational class or educational attainments" (Mocetti 2007:12). Most studies on income measure wages, also because accurate measurement of household's disposal income, that should take into account all the different sources of income (assets, earnings, welfare), are complicate and difficult to interpret. "Theoretical studies of intergenerational mobility regard long-run permanent disposable income as the most appropriate income concept. But empirical studies often use some measure of wages" (Causa and Johansson, 2009: 10). "Cross-country comparisons of intergenerational income mobility typically use father-son pairs of earnings rather than family income" (D'Addio, 2007: 29). In addition, household income is strongly influenced by the wage. "Earnings are the largest component of household income and, as a result, they play a key role in shaping changes in income inequality" (OECD 2008: 78). Moreover, as will be later mentioned, in Italy the increasing level of inequality seems to be mainly driven by a wider dispersion of wage.

For all of these reasons, the focus' shift from occupation to income does not create problems. Whatever aspect is under analysis, the central point is the influence of ascribed conditions, such as the family background on individual future attainments.

The rest of the chapter is organized as follows. In section 4.2 the possible links among inequality of income and intergenerational social mobility are explored. In section 4.3 the existing empirical literature suggesting the existence of a relationship between the two factors is reported. In section 4.4 the Italian case is investigated. The last section will analyse the concept of inequality traps that include both inequality of income and intergenerational social mobility and some consideration on their relation with growth are made.

4.2 Social mobility and inequality of income

Several studies exist arguing that wider inequality of income can influence the association between parents and offspring income. There is an apparent positive relation between inequality of income distribution and intergenerational income mobility. The two concepts may seem disconnected since they take into account different time perspectives. Income inequality looks at differences from points in time, while intergenerational income mobility looks at differences across generations. According to Meastri et al. (2011) intergenerational mobility can be seen as a "dynamic" of inequality. Greater inequality alters the circumstance for the individual and social mobility is achieved with greater difficulty. Different distributions of income in a society may differently affect its socioeconomic movement. Rising income inequality may influence the opportunity structure, creating difficulty for children from poor families to compete successfully with children from rich families and climb the ladder for economic success. To measure the distance of outcomes, the inequality of income is used because it is a traditional measurement to represent the differences between each member of society from the average. It is commonly understood to play a key role in determining variations in human well-being, a critical factor in determining other non-income outcomes. This is made evident by the strong association between income inequality and inequalities in health, education and nutrition (UNDP, 2014). Disparities in income "shape the opportunities people have in life as well as their children's future: access to goods and services available on the market depends on economic resources as do - to a considerable degree - good educational outcomes and good health" (UN 2013: 25).

Larger income gaps between families are likely to imply larger gaps in the quality of education, in investment decisions and in the access to labour market opportunities for their children. A wider inequality of outcomes signifies greater differences in the starting point that may negatively affect social mobility, since families are equipped with different instruments to invest adequately in their children. Generally, low income households are marked for a number of negative conditions, such as: lower medical care, nutrition, less prestigious occupations, a likely lower level of education and so on. In fact, there is the idea of cumulative disadvantages "growing up in a low-income environment may cumulate with other forms of disadvantage" (OCED, 2008:204). On the contrary, high status families usually have more prestigious jobs, higher level of education that influence the socio cultural environments in which children are raised. Children from wealthier families have greater chances to attend higher level schools, to make higher human capital investments, better nutrition, medical care, or have more positive role models. The different impact of family background also depends on how unequal parents are. The widening of inequality leads to a broader and sharper difference in the initial circumstances.

Burtless and Jencks (2003) explain that affluent parents can purchase advantages for their children that other parents could not possibly afford. One such example is educational advantages. Higher inequality among families is associated with higher inequality in the availability of economic resources available for investment in children's education and upbringing. High-income households spend considerably more on their children's education than low-income household. Kornrich and Furstenberg (2010), in their working paper, investigate that parental spending is one of the main methods parents invest in children and one of the reasons why children from the wealthiest of households are more advantaged than children from poorer families. Kornrich and Furstenberg (2010) establish that upper-class families can increase the human, cultural and social capital of their children via high quality children care and preschool, educational toys and books, residence in superior neighbourhoods that assist human capital formation (e.g. library), access to superior schools, elite preparatory schools, prestigious college degrees, stipends or allowances that free them from the need to work during high school and college and so on.

Income inequality can mean greater gaps between the investments of parents with high income and those with low income. Clearly, this would affect intergenerational

mobility. The second chapter analysed the adversity of liquidity constrain in educational investments since it is difficult to borrow when human capital is the collateral. Wealth reduces the importance of market failure. In fact, upper-class families may dedicate expenditure on goods and services without liquidity constraints. While low-income parents will likely under invest, making the transmission of the socioeconomic status difficult to avert. "To the extent that such resources are important for parents' and children's educational decisions, higher inequality will tend to increase the association between social class background and children's life chances" (Mitnik et al., 2013:4). The ability to take advantage of education will be limited to children of richer households. Although in Italy the school system is public, thus financed by the government, a limited amount of resource in a family is negatively correlated to education's investments. Despite the existence of a publicly-funded system designed to provide all families, regardless of income, access to education, "lower-income students are also less likely to go into tertiary education" (Mocetti, 2007: 14). Piraino (2007) in his analysis over the Italian situation, also analyses fathers' mean income (in logs) for five classes of sons' educational attainments. He presents the existence of a relationship between levels of education and fathers' income, with graduates having, on average, wealthier fathers. As shown in Chapter 2, Checchi demonstrated that richer families tend to invest more in education than poorer families. A lack of resources can indirectly influence the decision of spending on children. There are numerous mechanisms to be considered. It should not be undervalued the importance of opportunity cost of not working. The individual surrenders a proportion of income during the period of education and training in return for increased future earnings. In Italy, there are no adequate returns to education. Thus poor families are less willing to assume the risk of not being adequately compensated for their use of resources.

The investment in human capital is crucial in the promotion of social mobility. Mitnik et. al., (2013) in their research develop a number of predictions about the role of mass education and income inequality with regards to social mobility. The "education hypothesis" focuses on the effect of mass education in reducing the intergenerational transmission of class. According to the role of education, they agree that a college education, open to children from all classes, reduces the effect of class origin on education attainment, thus an increase in social mobility. The income hypothesis suggests, to the contrary, that "the rise in income inequality amounts to an

unprecedented infusion of additional resources among the higher reaches of the class structures, an infusion that will work to increase the amount of reproduction" (Mitnik et al. 2013: 5). They believe that "takeoff in income inequality may be producing a historic decline in social fluidity" (Mitnik et al. 2013:3). As they suggest the income hypothesis is newer than the education hypothesis. They further explain that there is a takeoff in income inequality that does not necessarily relate to an increase in social immobility, rising income inequality may simply slow down the effect of mass education in the transmission of the socioeconomic position. According to them, inequality has some effects on social mobility but it is unclear if those effects are strong enough to undermine the countervailing effects of the expansion on education.

An important point is that low-income families are often associated with low-sociocultural environments, which affect children capabilities and investment decisions. The second chapter highlighted the importance of family and local community for the individual's development. High levels of inequality seem to promote higher levels of segregation along income lines that, as investigated, negatively affect social mobility. Upbringing in areas characterized by high concentrations of disadvantaged families negatively affect future children developments. Parents' socioeconomic status influences decisions on the location where they allow their children to grow up. Durlauf 1996 "*Theory of Persistent Income Inequality*" explains that often families segregate themselves into economically homogenous neighbourhoods and this is a cause of intergenerational persistence. He showed that "if endogenous stratification and within-neighbourhood feedback effects are strong enough, arbitrarily persistent income inequality can occur between families with identical initial conditions" (Durlauf 1996: 76). In his model "wealthy families have an incentive to isolate themselves from the rest of the economy in order to provide the highest level of education of their children at the lowest cost" (:82). If stratification occurs, poor families are isolated and such isolation can lead to persistent poverty among some families, because they are "unable to jointly generate sufficient human capital investment in their children to escape from low paying occupations" (Durlauf, 1996: 77). Higher inequality among families lead to different neighbourhood's decisions and rich parents have the luxury to choose to live in neighbourhoods with superior sociocultural environments, endowed with superior schools. Conversely, children from lower class backgrounds may be more likely to attend inferior schools, further lowering their relative school performance. Consistently

the Council of Europe (2013:55) has pointed out that the educational system should allow different socioeconomic groups to mix in the same school and class settings. Residential segregation of socio-economic groups and segregated schools appear to hamper social mobility. "Evidence suggests that increasing the social mix within schools may increase performance of disadvantaged students with neutral or in some cases with positive effects on overall performance. Thus, policies aimed at encouraging such mix in neighbourhoods may, therefore, play a role in mitigating inequalities." (Causa and Johansson, 2009:8).

Despite education attempting to compensate socio-cultural divergences from the beginning, the socioeconomic environment also has an impact on individuals' cognitive abilities and decisions. Higher inequality among families likely gives rise to higher variability in family environments, and this impacts child's performance and decisions. Parents with more human and material capital have greater incentive to invest in the education of their children. An educated parent seems to be "better aware of the psychological and economic value of education, and puts more pressure on his/her children to achieve more at school" (Checchi 2006, 216). It is important to remember the existence of school tracking in Italy that takes place quite early, at the age of 14 precisely. Mocetti (2007) explains that, also as in Italy, poorer parents may prefer to see their children become independent earlier on, thus tracking them into quick, or more vocationally oriented, educational lines.

A combination of income, education and occupation that represents the socioeconomic status of parents impacts the cognitive ability of infants. "Parents with higher educational level are in a better position to cover any lacks on which the school system may incur in regarding the orientation and support to the student" (Mocetti 2007:13). Children from disadvantaged families may receive less parental and domestic support and cognitive stimulation. Studies have found that gaps can emerge in the cognitive ability of children from different socioeconomic background.

The second chapter reported the study of Braga and Filippin (2012) in which it demonstrated the presence of wide inequality of in competences and school achievement among young Italian students. Individuals coming from higher educated parents have more competence and attend higher levels of education. A study of the OECD (2010a) shows evidence for a larger set of countries that have greater income equality is associated with a lower influence of family socio-economic backgrounds on

students' achievement in secondary education.

Checchi and Meschi (2012) wished to measure inequality in the distribution of competence in Italy. They show that in Italy, individuals from uneducated families that reach the university degree achieve a level of competence similar to that of those of a lower educated individual that comes from a highly educated family. This proves that a wider divergence in the levels of education among families, impacts the level of competence that children can reach. Competences are unequally distributed among the Italian population also at parity of qualifications. The "association between social class background and children's cognitive development may be stronger, the more inequality there is" (Sorensen, 2004: 370).

Moreover in Italy, returns to education are poorly correlated with academic performances and differentiated by family background. Piraino (2007) discovered that the inheritance process operating through superior educational attainments of those with well-off parents, while important, accounts for less than one third of the intergenerational transmission of economic status. This result gives credibility to the hypothesis that in Italy equally educated children have unequal chances depending on their family background. Raitano (2009); Franzini and Raitano (2013) among others, show empirical evidence that in Italy, family backgrounds can exert a direct effect on children's wages. Using the data on family background from the 2005 wave of EU SILC they show that "parents' occupation has an additional influence, beyond that of educational attainment, on the earnings of their offspring" (Franzini and Raitano, 2013: 331).

Of course, a similar disequilibrium among individuals is interiorized, discouraging human capital investments. Sharp socioeconomic inequality plays a role in making the individual feel disadvantaged and not suitable in investing education. If individuals internalize beliefs about their own inferiority, they likely adjust their ambitions downwardly. As suggested by Gary Becker, if people born into families who are low on the income distribution, they may possibly sense few opportunities to arise, they will have little incentive to try to better their lot.

Poverty is probably not simply a question of parental spending power. An additional effect comes from income insecurity, "which produces risk adversity and may lead parents to curtail children's schooling prematurely" (Esping-Andersen, 2009:121). Mocetti (2007) explains that given two individuals, both equally risk-averse, different in

economic security and stability [what characterizes advantages and disadvantages of different social class of origin] they will translate into a pronounced difference in risk taking. People from low classes show a "higher willingness to accept low-wage jobs, and this entails important consequences later in life" (Mocetti, 2007: 18). Mitnik et al. (2013) establish that parents may help also when the child has reached adulthood, that well off parents may decide to finance a late-adult professional degree, or to provide economic support for when their adult child is unemployed or rather help their adult children pursue entrepreneurial opportunities by providing start up resources or also implicit insurance in case of failure.

There exists another mechanism through which inequality of income may influence social mobility. Yaish and Andersen (2012) explain that if inequality is high, the consequences of downward mobility for those in high-class positions are more severe than if the distances between the classes were small. As a result, those at the top of the class hierarchy are highly motivated to ensure that the status quo is maintained under conditions of high inequality and thus mobilize their resources to this end. Rising inequality provides "privileged families with more resources that can then be lavished on their children, resources that raise their chances of securing desirable class position for themselves" (Mitnik et al. 2013:6). High economic inequality increases the stakes in the competition for a beneficial position. "Thus, privileged individuals and families may use greater efforts to maintain their advantage for themselves and their children thereby making the competition more unequal for those less privileged" (Sorensen, 2004:370). Erikson and Goldthorpe (1992) underlay that there are some inherent tensions between the goal of equality of opportunity and the interests of each family to ensure its offspring's future life chances. As Erikson and Goldthorpe said in "*Constant Flux*": "even though the 'logic of industrialism' may create pressures for the fuller use of a society's stock of talent through more universalistic processes of social selection, these pressures would seem more often than not to be resisted, and by opposing forces which operate chiefly at the micro level of 'adaptive' individual and family strategies." (Erikson and Goldthorpe, 1992: 394).

In addition, in a society with high levels of inequality, the median voter will tend to lie below the mean income and it is highly likely that they will have more demand for redistribution. Burtless and Jencks (2003), in their research, consider the impact that inequality of income may have on political influence, explaining that if the distribution

of income is more unequal, then it is likely to increase the influence of those with money to spend on activities connected with political elections. Andrews and Leigh (2009) assert that if "increases the political influence of the wealthy – perhaps through campaign finance contributions – then the scope for government to institute progressive policies may narrow" (:1489). "If voting power is not distributed uniformly, but increases with private wealth, a self-sustaining high-inequality trap may arise, whereby educational inequality ensures the persistence of wealth inequality, which in turn ensures the persistence of political inequality, which in turn guarantees the continuation of educational inequality" (Ferreira 2001:17).

Hence, the section has demonstrated its investigation into some reasons as to why inequality of income could reinforce intergenerational social immobility. It is relatively difficult to analyse the potential consequence of rising income inequality on intergenerational social mobility. Despite a causal link between the two variables not being established, according to a number of empirical studies, current inequality seems to be positively correlated with its intergenerational transmission. That severe inequality today can make it more likely that the son of a poor man will himself be poor, and the son of a rich man will be rich. Corak (2013) asserts "an emerging body of evidence suggests that more inequality of incomes in the presents is likely to make family background play a stronger role in determining the adult outcomes of young people, with their own hard work playing a commensurately weaker role" (Corak 2013: 1). The following section will report empirical cross-national observations.

4.3 The *Great Gatsby Curve*

Income inequality is increasing in many parts of the world and it has received growing attention from academics and policymakers. Inequality of income is commonly measured through the Gini Index, that is, a measure of statistical dispersion intended to represent the income distribution within a nation. It measures the inequality among values of a frequency distribution (as a level of income). The Gini coefficient is based on pair wise distance between individuals. The distance between individuals with income determines, to a large extent, the level of inequality. It determines how much of a nation's income is concentrated among the wealthy. The coefficient varies between 0

which reflects complete equality, and 100 (or 1) which indicates complete inequality (one person has all the income, whilst the rest have none). A low Gini coefficient indicates a more equal distribution, with 0 corresponding to complete equality.

Andrews and Leigh (2009) explain that literature on inequality and intergenerational mobility for years have largely been developed in isolation from one another, and for years little has been known about the association. The relation between the two is not so straight, however recent research tends to show that higher income inequality tends to be associated with lower intergenerational mobility. D'Addio (2007) also states that if there is "no consensus on this issue in literature, some of the evidences suggests that a link between cross section income inequality and intergenerational income mobility might exist"(:45). Recent OECD research showed that "persistence in wages across generations appears to be positively associated across countries with measures of inequality, i.e. of the dispersion of parental backgrounds" (Causa and Johansson, 2009:10).

One of the first empirical studies on the field was developed by Bjorklund and Jannti (1997), "*Compared Intergenerational Income mobility in Sweden and United States*". They were wondering if the extent of cross sectional and intergenerational inequality or "equality of opportunity and equality of outcome are independent of each other" (Bjorklund and Jannti, 1997:1018). Beginning with the fact that Sweden had less cross sectional income inequality and also more intergenerational mobility. They showed, as in terms of inequality of opportunity, that Sweden and the United States were two extremes among the OECD countries. The United States was at the top and Sweden at the bottom of orderings of inequality disposal income. When looking at the intergenerational earning inequality, the rank order was relatively similar (Bjorklund and Jannti, 1997). However, they affirmed that it was not possible establish a relation between the two factors with a sample of only two countries, asserting that further international comparisons could shed light on this issue.

Andrews and Leigh (2009) investigated social mobility in societies that display inequality. They achieved it by proxying a father's earning utilising occupational data. They discovered that sons who grew up in countries that were more unequal in the 1970s were less likely to have experienced social mobility by the late 1990s. Harding et al. (2004) studied the US case and they showed that when income inequality fell slightly, intergenerational mobility, on the other hand, rose; and subsequently when

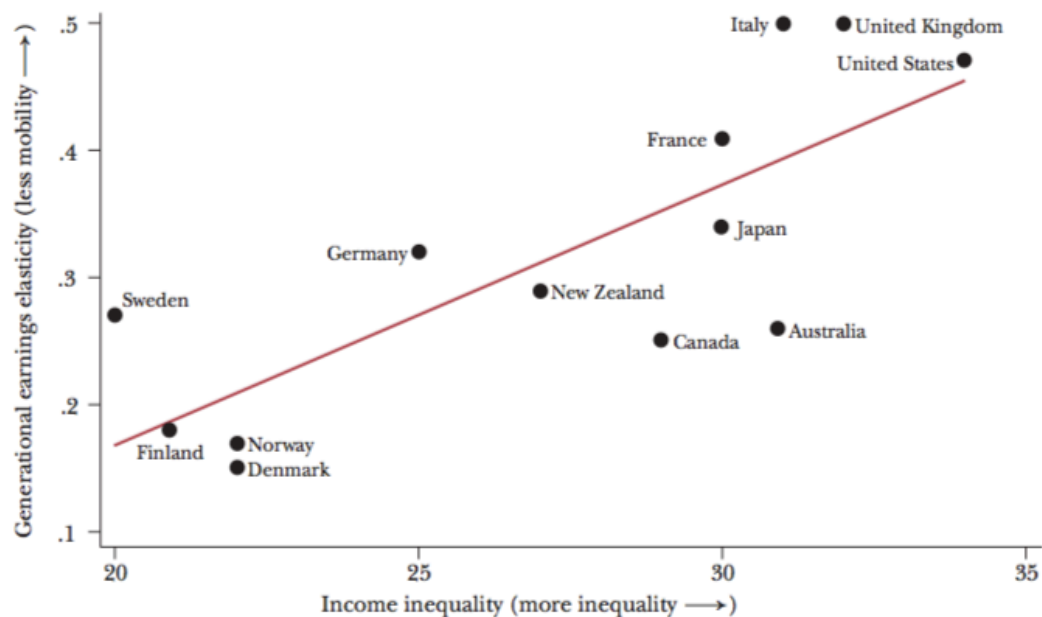
income inequality began to rise, mobility fell back. There is some sort of crude empirical relationship between overall socio-economic inequality and social mobility; however it doesn't necessarily demonstrate a causal link (Harding et al., 2004).

One of the most recent cross-country works on the issue, that includes Italy, is the research of Corak (2013). His starting point is that inequality skews opportunity and lowers intergenerational mobility. "Increasing inequality in the high income countries, is likely to limit economic mobility for the next generations of young adults" (Corak 2013:80). He presents the evidence that countries with more inequality at one point in time also experience less earning mobility across the generations. The curve is named "The Great Gatsby Curve". Defined in this way in a 2012 speech by Alan Kruger, using data from a previous work of Miles Corak.

To obtain the Great Gatsby Curve, countries are ranked according to two dimensions. In the horizontal axis there is income inequality measured by the Gini coefficient. In the vertical axis: intergenerational economic mobility, specifically the elasticity between parental earnings and a son's adult earning. It represents the relationship between income inequality and intergenerational economic mobility. In the reported curve utilizes data on a cohort of children born during the early to mid 1960s and measuring their adult outcomes in the mid to late 1990s.

Figure 4.1

The Great Gatsby Curve: More Inequality is Associated with Less Mobility across the Generations



Source: Corak 2013

Each point is a country. The curve reveals logic about the distribution of the countries along a unique line, which indicates the existence of a negative correlation between the two variables. Higher degrees of inequality correspond to lower chances for sons to improve their earning in comparison to their family background.

Higher values along the X-axis reflect higher degrees of Gini coefficients, thus greater inequality in family resources. Finland, Sweden, Norway and Denmark are the countries displaying most equality. The United Kingdom, United States and Italy are the least equal.

Higher values on the Y-axis indicate a lower degree of economic mobility across generations, thus higher transmission of economic status from father to son. Intergenerational earning mobility is measured using intergenerational earning elasticity that gives an overall average measure of the degree of mobility. As the Gini index summarizes the degree of inequality at a point in time, earning elasticity summarizes the extent of inequality transmitted across generations. Thus, do not mention anything about the direction of change. Through elasticity of income, it is possible to see the degree to which earnings are similar across generations. Higher is the income elasticity, then lower is the level of mobility and as a result a parent's place in the earning

distribution will tell us more about where we can expect the child's place to be. The lower the value, lesser is the parent's earnings a predictor of the child's earnings. In Finland, Norway and Denmark earning elasticity is lower. The association between parents and children economic status is weaker, "less than one-fifth of any economic advantage or disadvantage that father may have had in his time is passed on to a son in adulthood"(Corak 2013:4). On the other side, in countries like Italy, the United Kingdom and United States "roughly 50 percent of any advantage or disadvantage is passed on" (Corak 2013:4).

The Great Gatsby curve shows the advantages that children from better-off families can expect to have in the next generation, relative to those from low-income families. As in the study of Bjorklund and Jannti (1997), rank order is similar for both inequality of income and social immobility. In general, the countries with the most equal distributions of income at a given point in time exhibit the highest income mobility across generations. "Countries with greater inequality of incomes tend to be countries in which a greater fraction of economic advantage and disadvantage is passed on between parents and their children" (Corak 2013:17). The exceptions include Australia and Canada, which combine high mobility with moderately high inequality, as well as France that represents a lower level of mobility than would be expected from its level of inequality. According to a number of empirical studies, current inequality is positively correlated with its intergenerational transmission. As explained by Corak, it is not conclusive, nor a causal relationship; however it is "too glib to dismiss it by saying correlation does not imply causation" (Corak 2013:85). Despite not being a causal relation, it cannot be said definite that current inequality and its intergenerational transmission are completely independent phenomena with different mechanisms at their roots. The Great Gatsby curve can be understood as signalling rather than directly measuring a negative relationship between inequality and equality of opportunity.

There are studies that focus directly on measuring inequality of opportunity in a country. This means to measure the extent to which inequality is unfair because it is inequality due to circumstance and not efforts. Inequality of opportunity is a complex concept, yet it has been measured in a number of different ways. Brunori et al. (2013) explain that one of the indexes that have been applied to enough countries to permit international comparisons is inequality of the economic opportunity index (IEO). It is the share of income inequality that can be attributed to differences in circumstance such

as family background. In his work, Brunori et al. (2013) review the empirical literature of the IEO for 41 countries. "The evidence reviewed suggests that an important portion of income inequality observed in the world today cannot be attributed to differences in individual efforts or responsibility. On the contrary, it can be directly ascribed to exogenous factors such as family background, gender, race, place of birth, etc." (Brunori et al. 2013:17). Moreover, in his research data revealed the existence of a positive correlation with inequality of opportunity and income inequality and a negative correlation with social mobility. He explains that more inequality in the income distribution means more inequality in the economic opportunity; hence income inequality can be attributed to circumstance such as family background. In addition, inequality in economic opportunity is negatively correlated to intergenerational mobility. Therefore more intergenerational mobility is correlated with less inequality of the economic index. These findings are consistent with the empirical literature on social mobility just investigated. Cross-country association between inequality of economic opportunity and intergenerational mobility seem to be rather robust. Brunori et al. (2013) assert "inequality of opportunity is the missing link between the concepts of income inequality and social mobility: if higher inequality makes intergenerational mobility more difficult, it is likely because opportunities for economic advancement are more unequally distributed among children. Conversely, the way lower mobility may contribute to the persistence of income inequality is through making opportunity sets very different among the children of the rich and the children of the poor." (Brunori et al., 2013:17)

The relation between inequality and social mobility is considerably interesting. Inequality of income has been largely studied about its impacts on economic development. However, inspecting only the income distribution many dynamics do not emerge. Indeed there can be movements in the distribution of income that compensate each other. Adding some consideration about intergenerational social mobility, it is possible to better understand income inequalities. Considering only income distribution, it is not possible to distinguish if the poor are poor because they are less talented or because they come from a poor family. By investigating the intergenerational social mobility, this point can be made clearer. If a society displays low levels of mobility, then it means that the probability of passing into another quintile is not equally shared. "Higher income inequality would be less of concern if low-income earners became

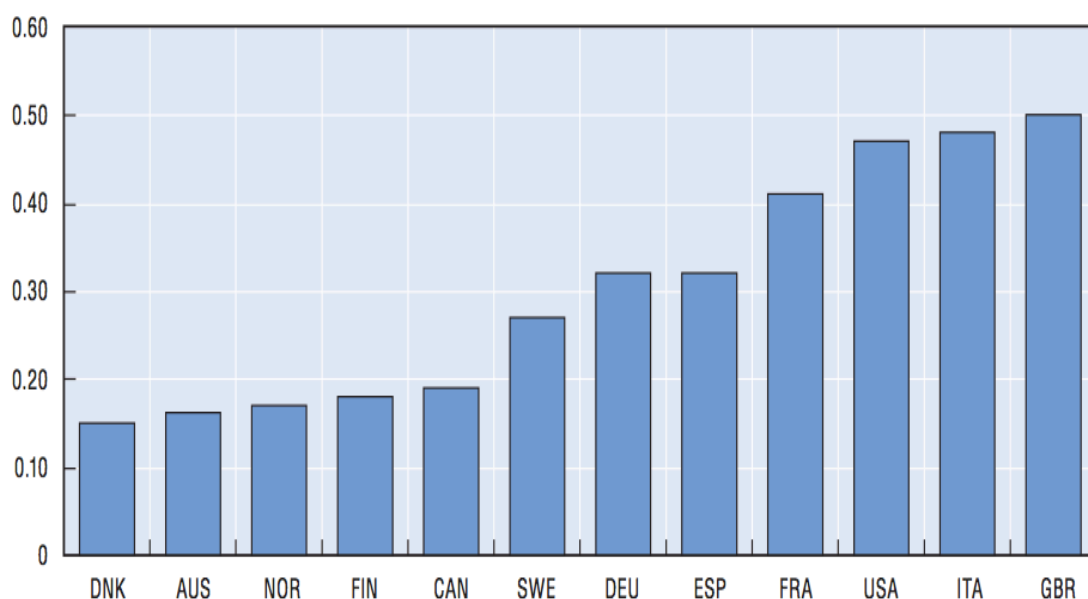
high-income earners at some point in their career, or if children of low-income parents had a good chance of climbing up the income scales when they grow up" (Kruger 2012:3).

4.4 A case study of Italy

Inspecting the Great Gatsby Curve, Italy cannot be described as the land of opportunity. The image is not exactly encouraging. In terms of both income inequality and social mobility, Italy proves to be in a rather negative situation, when compared to other nations, most of which are democratic countries with market economies.

The OECD report "*Economic Policy Reforms: Going for Growth 2010*" assesses and explores intergenerational economic mobility in some OECD countries. The extent to which sons' earning levels correlates with those of their fathers. From understanding the figure, it is possible to conclude that in Italy such persistence is particularly pronounced. In the United Kingdom, Italy, the United States and France "at least 40% of the economic advantage that high earnings fathers have over low-earnings fathers is transmitted to their sons" (Oecd, 2010:184).

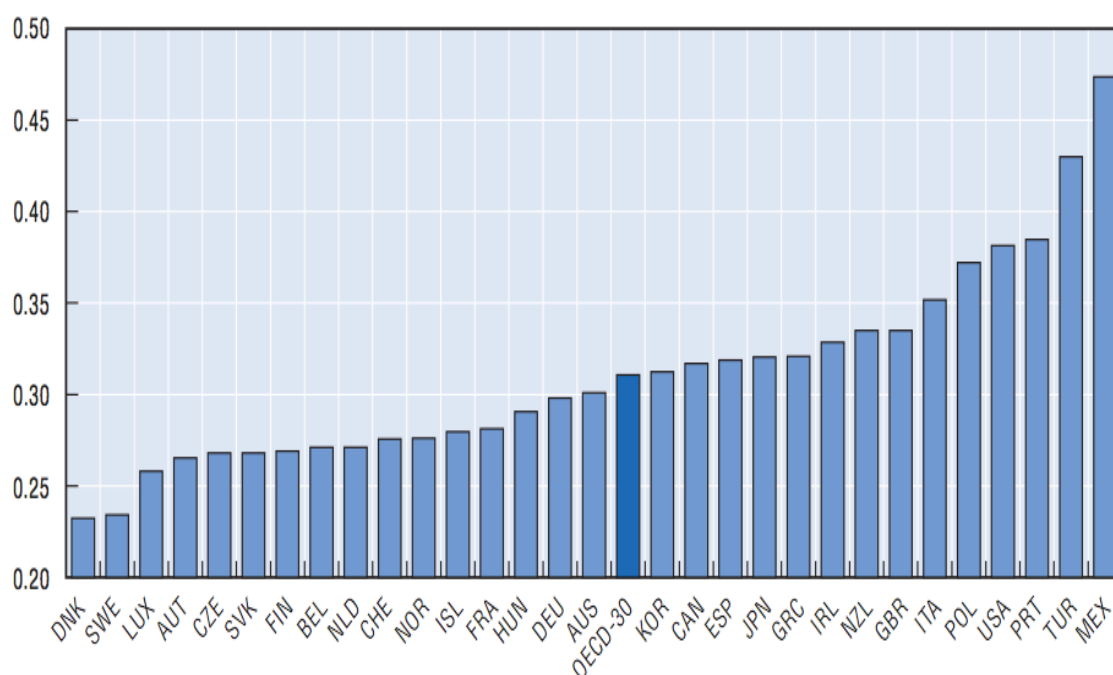
Figure 4.2 : The strength of the link between individuals and parental earnings varies across OECD countries



These evidences are confirmed by recent and specific studies focused on the Italian situation. Piraino (2007) examines the degree and pattern of intergenerational economic mobility in Italy using the data from the Bank of Italy. In light of the regression coefficients for the intergenerational income equation for Italy, intergenerational persistence appears to be high and significant. The values indicate that "about half of the economic advantage Italian fathers is passed on to their children" (Piraino 2007:16). This evidence "hints at Italy in the low-mobility group among advanced societies". His results are consistent with the image of Italy as a rigid society. Mocetti (2007) provides a study on income elasticity for Italy as well. In accordance with Piraino (2007) he concludes "the degree of intergenerational income mobility in Italy is lower than that observed in other developed countries" (Piraino, 2007:17), depicting Italy as strongly immobile society.

With regard to income inequality, Italy does not display a favourable situation either. In the OECD report (2008) "*Growing Unequal?*" 30 developed countries were examined. It demonstrated that in overall there has been an increase in income inequality since the mid-80s and Italy is one of those countries in which inequality has risen significantly. The overall shape of distribution of households' disposal income differs significantly across countries. In figure 3, the distribution of income in the mid-2000 measured through the Gini coefficient is represented. Some countries have substantially more unequal income distribution than others.

Figure 4.3: GINI coefficients of income inequality in OECD countries, mid-2000s



Source: OECD 2008

Countries are ranked from left to right in increasing order in the GINI coefficient. The left of the chart represents the countries with low Gini coefficient values, below the OECD average that are characterized by low-income disparities. The right represents the countries disposing a high value of Gini coefficients. Italy is part of this group, exceeding the OECD average. The Gini index stands at 0.34 and the underlying trend is on the rise. In the "*GINI Country Report Italy*" (2012) it is asserted that when compared to other countries "Italy appears as one of the most unequal countries in terms of income distribution. Leaving aside developing countries (like Mexico and Brazil) and free market economies (like United States), Italy contrasts United Kingdom as the most unequal economy in the OECD area" (Ballarino et al. 2012:11).

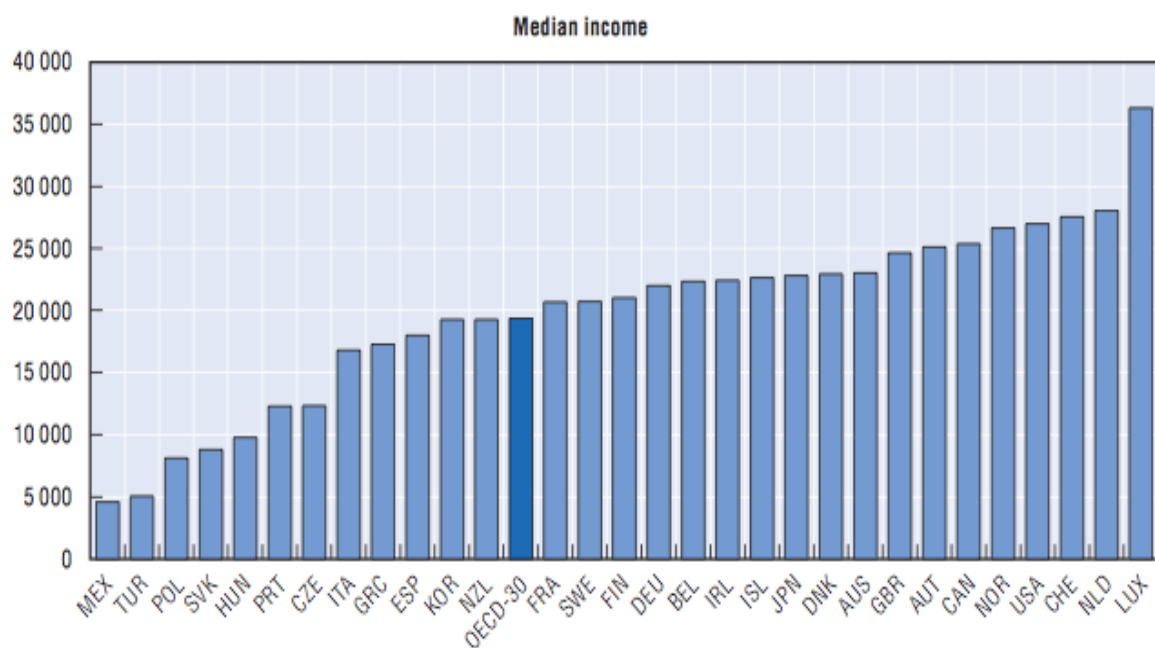
Inequality has grown, however viewing the Gini it is not possible to completely understand the trend of change. Fiorio et al. (2011) provide a description of the dynamics of inequality in Italy. In Italy the Gini coefficient of total equalized income declined gradually until the late 1980s, grew suddenly during the 1991- 1992 recession and remained approximately stable thereafter. They analysed this change and discovered that changes in the distribution of labour income and self-employment income tended to increase overall income inequality. As explained in the introduction of this chapter, earning is a variable that directly influences the standard of living for

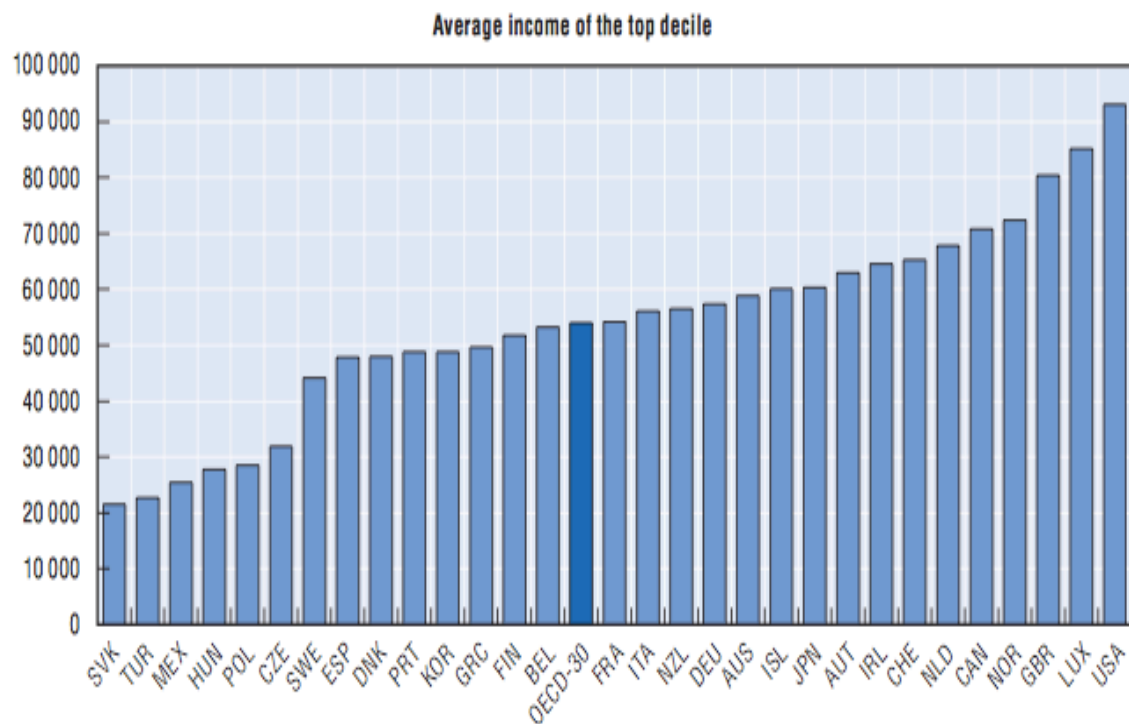
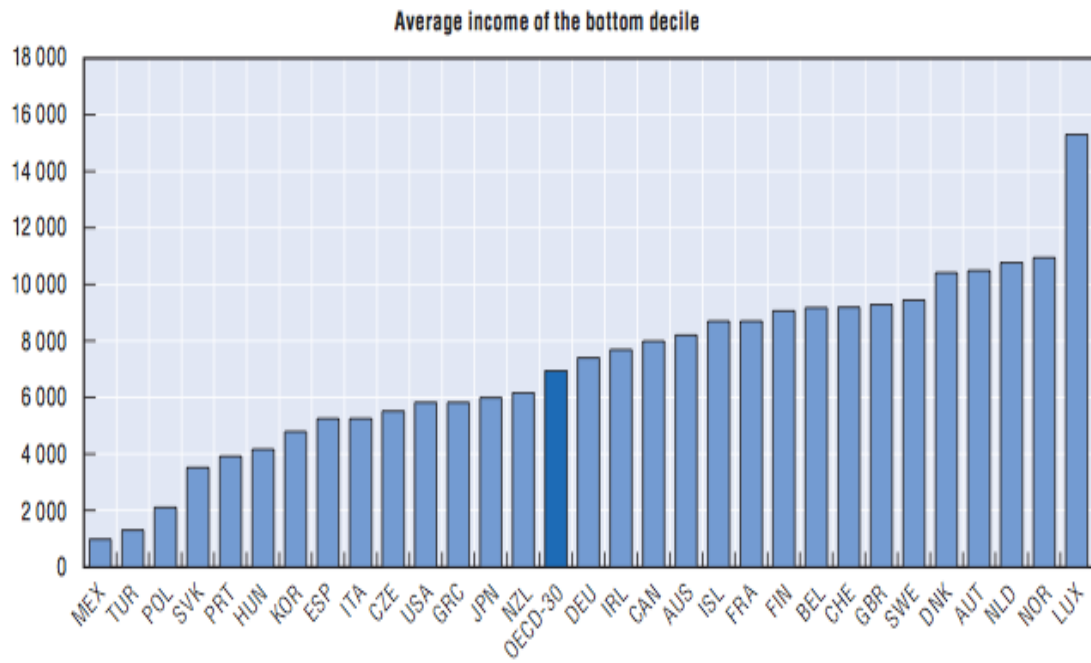
individuals and is associated with the job position. The key policy recommendations for Italy from the OECD report (2011b) "*Divided We Stand*" asserts that employment is the most promising way of tackling inequality. Increase in income inequalities in Italy are mainly driven by a wider dispersion of wage. These findings support the idea that as far as Italy is concerned, it is not problematic to study intergenerational social mobility from both income and occupational mobility.


A number of studies have established that in Italy, as in other countries, the rise in income inequality is largely due to an increase in incomes of the richest. A growing empirical literature suggests that the growing gap between rich and poor is driven by top income. Alvaredo and Pisano (2010) analyse the performance of the very high-income earners and described the evolution of top income shares in Italy between 1974 and 2004. They provide an interesting insight on income distribution evolution, with a persistent increase in income concentration within the very top of the population since the mid 1980s. They divided the top deciles into three subgroups: the bottom half of the top deciles 10-5%, the 4% and the 1%. They presented that "the increase in income concentration, which took place in Italy since the mid 1980s has been a phenomenon happening within the top 5% of the distribution, and mainly within the top 1%," (Alvaredo and Pisano, 2010: 14). Certainly, the top 1% share increases from 6,3% in 1983 to 9,3% in 2003. They split the top 1% again, discovering that the top 0,1% increased sharply by over 80% from 1,5% in 1983 to 2,7% in 2003. The wealthier the group considered, higher is the increase in the distribution from the mid 1980s. They suggest that the late 1980s and early 1990s were years of unequal growth. They further established that the increase in top income shares since the mid 1980s are mainly driven by top wages and self-employment incomes. Pisano and Tedeschi (2007) in "*Tendencies in income distribution and the crisis of the middle-class in Italy: perception or reality?*" reveal a downward mobility for the middle and the upper middle quintile and a higher persistence for the bottom part of the distribution. Thanks to these, and other, studies it is now possible to assert that in Italy there has been a polarization trend. Inequality has generally risen because rich households have done particularly well in comparison with middle-class families and those at the bottom of the income distribution. Italian income distribution has become fatter at both tails, while there has been a reduction of the middle quintiles.

The described situation can be quite interesting with regard to intergenerational social mobility. Indeed Esping-Andersen (2006b) suggests that the relationship between income inequality and inter-generational mobility is especially pronounced at the top and at the bottom of the income distribution. Before explaining this concept, it is considerably interesting and consistent with the previous analysis to show the cross-country differences in the income level of people belonging to similar deciles, paying specific attention at the Italian situation. The OECD's report "*Growing Unequal?*" (2008), analyses the average income of people belonging to different deciles of the distribution, in some OECD countries the cross-country differences in the income level of people at similar points in the distributions is reported.

Figure 4.4: Income levels for people at different point in the distribution, mid. 2000
(US dollars at PPP rates)





StatLink  <http://dx.doi.org/10.1787/420757110442>

Source: OECD 2008

Closer inspection of the three figures leads to the emergence of valuable information regarding the differences that exists in Italy among people belonging to the middle-class and those from the bottom deciles and the top deciles. It is possible to see that the average income of the median and the bottom deciles in Italy is below the OECD-30 average. Contrary to the average income of the top deciles, that is above OECD-30 average. The report underlines that differences across countries are lower when "assessed relative to the average income of all people at the top of income distribution" (OECD, 2008: 38).

As elucidated, Esping-Andersen (2006b) suggests that the relationship between income inequality and inter-generational mobility is especially pronounced at the top and at the bottom of the income distribution. Meaning that the probability of a son existing in the same earnings quintile as his father, is greater in the lowest and highest quintiles. He establishes that the children of the very rich appear to be specially protected from downward mobility, which rich families seem to be more able to secure the future for offspring, while the children of the very poor face barriers of upward mobility. This is what Raitano and Vona (2011a,b) called the parachute effect. Meaning that when analysing intergenerational occupational and educational mobility the correlation between family background and child earnings in Italy is mostly associated to a parachute for those descending the social scale. The children of the affluent rarely witness a decline of their social position, they have a series of advantages to defend and protect them by undesirable outcomes. "Income advantage associated to a better background can either be concentrated in top occupations, conjuring a sort of glass ceiling, or be a sort of parachute dampening the drop of well-off offspring which ends up in bottom occupational groups" (Raitano and Vona, 2011a:8).

The general assumption is that wealthier a family is, the more likely its children will not drop significantly below their parents rank (in the income distribution). According to Esping-Andersen (2014), to the extent that this holds true it would naturally follow those countries where there are more extremes in the income distribution would have more immobility. This raises some concern about the ability of the disadvantaged to work their way up the economic ladder. "Income, education, occupation and personal traits all tend to be transmitted from parent to their offspring, especially at the top and at the bottom of the distribution" (OECD, 2008: 202). If high immobility exists, that there is a relevance of family background on child achievement, the strength of the impact

will depend on how unequal parents are. The “absolute effect of a given intergenerational earning elasticity will, of course, be greater in more unequal societies” (OECD, 2008: 206.) If a wide inequality of income exists, the consequences and the presence of social immobility are reinforced.

Regarding Italy, these intuitions are corroborated by two contemporaneous and independent works (Mocetti, 2007; Piraino, 2007). Through the standard regression of son's incomes on father's income, it is possible to obtain an understanding of the overall intergenerational income elasticity. The value shows a summary indicator of the degree to which economic differences between individuals persist across generations. However, Mocetti (2007) enunciates that it gives an incomplete picture. Through the use of the quintile regression approach, he wishes to quantify the effect of father's income across the distribution of son's income. So not just on the mean. "Quantile regression can be useful when we wish to see whether the explanatory power of fathers' incomes is different for sons ending up at the top of the sons' income distribution than it is for those at the bottom of the distribution" (Mocetti, 2007: 3). It provides a more complete statistical analysis of the intergenerational relationship across the distribution of son's income.

Mocetti shows, as there is a very low degree of upward mobility of those coming from low-income families. "There seems to be an invisible ceiling that impedes reaching the top starting from the bottom"(Mocetti, 2007:17). He discovered evidence that suggests stronger immobility among the upper quintile of sons' income distribution, and this highlights the inadequacy of the institutional setting in guaranteeing opportunities of upwards mobility for individuals from low-income families" (Mocetti, 2007:17)

Piraino (2007) also provides a way to measure intergenerational mobility taking into account quintile divisions. He uses the transition matrices that make it possible to investigate the pattern of intergenerational immobility. This approach relies on discrete categorizations and investigates the conditional probabilities of transition among ordered income quintiles/groups.

He constructed four income classes for both father and son:

(i) "Low-income"	Which includes individuals with income below two-thirds of the median
(ii) "Lower -middle"	From higher incomes up to the median
(iii) "Higher-middle"	For incomes from the median to 150% of the median;
(iv) "High-income"	For the rest of the individuals.

Figure 4.5

Transition Matrix by Income Classes

	Son	Low-income	Lower middle	Higher middle	High-income
Father					
Low-income		20.14	51.37	19.87	8.63
Lower middle		11.59	47.38	29.32	11.71
Higher middle		11.75	35.12	26.98	26.14
High-income		2.83	11.15	38.07	47.95

Notes: Values expressed in percentages.

Source: Piraino 2007

The transition matrices give the fraction of sons in each income class given the predicted class of their fathers. He underlies the existence of a wealth trap. Well-off families are very likely to pass on their economic status to their offspring. The probability to move up to median income or higher from the bottom is 28.5% against a probability of 86.02% to be there from the top; the probability of a movement from the lowest class to the highest is only 8.63%.

Social mobility makes it possible for individuals who begin from a financially meagre position to attain a more prosperous position, that through effort it is possible achieve any socio economic position available. The intuition is that when inequality within a country widens, it raises the difficulty of reaching a specific point. As income inequality increases the gap between families at the top and at the bottom of income distribution growth, top income households distance themselves from the middle. Excessive

divergence in income seems to negatively impact equality of opportunity and social mobility. At the same time, if there is social immobility and wide inequality of income the negative impact of high immobility is reinforced. The final section will analyse the so-called inequality traps.

4.5 Inequality, mobility and growth

In this final section, consideration is made concerning the link between inequality of income and growth. Once again, as for social mobility, the relationship is quite complicated. Efforts to understand their relationship have yielded mixed results. Once was the Kuznets hypothesis prominent and hugely influential, being one of the first empirical researches on the relationship between growth and income inequality. Kuznets (1995) suggested the existence of an inverted-U relationship. The idea was that growth shapes inequality, that structural transformation takes place as an economy develops and that income inequality (as measured by the Gini index) can follow an inverse U pattern since inequality rises at the beginning of industrialization or development and then declines when more workers join the high-productivity sector. At low levels of growth, inequality should increase, while it should decrease with development. Barro (2000) in his analysis found that the Kuznest curve "whereby inequality first increases and later decreases during the process of economic development emerge as a clear empirical regularity" (Barro, 2000 :29). On the contrary, Deininger and Squire (1997), using their data, wanted to test the Kuznest hypothesis, to see if inequality increases in the early stages of development and then declines. They find "no evidence of it in almost 90 percent of the cases" (Deininger and Squire, 1997:40). They explain that 30-year period covered by their data as being too short to produce the inverted-U postulated by Kuznest. Thus, they explored the possibility if inequality increased in low-income countries and decreased in high per capita countries, however the data confirms the presence of a linear trend only in few countries. "Even where it exists, the trend rarely conforms to the Kuznets hypothesis" (Deininger and Squire, 1997:40). Examining the relationship between growth and changes in the incomes of those at the bottom end of the distribution, they found little systematic relationship between overall growth and changes in inequality. "Periods of growth are

associated with an increase in inequality almost as often (43 cases) as with a decrease in inequality (45 cases)" (Deininger and Squire, 1997:41). According to their analysis, there is no string or systematic relationship between growth and changes in aggregate inequality. Some authors assert that the Kuznets theory does not entirely take into account the role of policy in the relationship among inequality and growth. Many authors suggest that the effect of growth on inequality may be mediated by changes in institutional factors that accompany the process of growth, so the relationship between growth and inequality does not simply and smoothly run from the first to the second. The last report of the UN on the World Social Situation (2013) documents that as countries have grown and developed, inequalities have increased in many cases, and in other cases it has declined but it is underlined that "successful cases of reducing inequalities illustrate the importance of policies" (:25). Hence, institutions contribute in shaping inequality trends. As for social mobility, the impact that growth may have on inequality is not established. The effect that wide inequality may have on growth has been subject for lively debate and discussion as well.

Recent works indicate the existence of a negative relationship between inequality and growth. Deininger and Squire (1998) investigated the effect of inequality on growth using data from 1960 -1992, and their results found a negative link between income inequality and growth. However, they suggest that the relationship is not remarkably strong. Barro (2000) in his analysis discovered that higher inequality tends to retard growth in poor countries and encourage growth in richer countries. Voitchovsky (2005) highlights that theoretical models indicate that inequality can both facilitate and retard growth. Examining the existing literature, she unearths that a positive mechanism "can be linked to inequality at the top end of the distribution while many of detrimental effects can be traced to bottom end inequality, or relative poverty" (Voitchovsky, 2005: 273). The effect of inequality on growth may depend on inequality in different parts of the income distribution. Thus, inequality at the top and bottom ends of the distribution has different effects on growth.

The central hypothesis explored by Voitchovsky (2005), using the Luxembourg Income Study, is that top end inequality encourages growth while bottom end inequality retards growth. Consistently, with the reasons investigated in this chapter, Voitchovsky explains that at the top of the distribution there are no barriers to implement investment plans and that they are also the central source of savings, boosting the available funds

for investments. Nevertheless "this process associated with the better off could be offset, or the economy could end up in a sub optimal equilibrium, if not enough wealth trickles down the distribution - that is, if some agents are left behind in the growth process, leading to high bottom end inequality" (Voitchovsky, 2005: 274). It has been analysed that wide inequality can increase the role played by credit constraints, leading to suboptimal investment in human capital, an underuse of talents that negatively affect a country's development.

The results of the empirical analysis carried out by Voitchovsky (2005) suggest that growth is facilitated by an income distribution that "is compressed in the lower part of the distribution, but not at the top end. In this view, redistributive policies are likely to facilitate growth through their impact on the bottom of the distribution and to inhibit growth through their impact on the top of the distribution" (:290). Despite the vast theoretical literature on the relationship between inequality and growth, no consensus has emerged and the empirical evidence is inconclusive, the debate on whether the effect of income inequality on growth is positive, negative or not significant is still open.

As elucidated to in the chapter, a number of authors believe that higher inequality fosters aggregate savings and capital accumulation. Other authors have highlighted that higher levels of inequality may provide the incentive to work harder. Indeed there are authors suggesting that income inequality is a good incentive for growth. Aghion et al. (1999) explains that often it is asserted that inequality is considered beneficial for growth, and growth consideration might be traded off against equality. The main argument is that higher inequalities increase the stakes in the competition for good positions. As a result, this should create incentives for people to invest more in human capital, to be further motivated to try and get ahead the competition. This idea began from the work of Davis and Moore (1945), they suggested that unequal rewards are useful in order to ensure that the most able individuals are allocated in the most important position in their society. To place and motivate individuals in the social stratification, the rewards have to be differentially distributed. Through inequality, it is insured "that the most important positions are filled by the most qualifies persons" (Davis and Moore, 1945: 243). They argue that skilled and talented people are more likely to pursue an occupational career that is more demanding if there are higher rewards. As a consequence, since in an unequal society the rewards are higher, talented

people are more motivated to make the necessary investment to achieve this high position.

Beyond empirical evidence, already established to be inconclusive, a central point is that if there is no social mobility there are no social and economic structures which reward effort and ability. To seize the possible positive effect of large inequality, greater efforts have to be incentivised. Talented individuals coming from disadvantaged environments must have the possibility to develop and to seize the return of their skills. Otherwise the positive effects on growth of inequality are offset. This is the case in the absence of social mobility since members of a society do not share equal chances to reach a socioeconomic position. Circumstances beyond individual control are more important, and individual efforts are not entirely considered. Efforts, productivity and risk-taking are not encouraged, generating lower growth rates.

If a society disposes both wide income inequality and low levels of social mobility, then the entire distribution is stable. Advantages and disadvantages are blocked in a segment of society. Various dimensions of inequality interact between each other protecting the rich from downward mobility and preventing the poor from being upwardly mobile beyond their real abilities. Inequality of income for one generation means inequality of opportunity for the subsequent generations. If individual opportunities depend on family income, this means that individual position and success are correlated to circumstances beyond their control and not entirely dependent on their efforts.

When inequalities are perpetuated over time, the poor are persistently poor and the rich are persistently rich and this generates, in what the World Development Report (2006) defines as, "inequality traps". According to Bourguignon et al. (2006), inequality traps means "persistent differences in power, wealth and status between socio-economic groups, that are sustained over time by economic, political and socio-cultural mechanisms and institutions" (236). The salient feature of inequality traps is the permanent "non-convergence" in the opportunities of some social groups. Inequalities in opportunity are reproduced over time and across generations. There exists a long-run distribution of advantages in which a particular social group does persistently perform worse than some other social group, even though an alternative equilibrium exists. Inequality traps are "vicious circles, with economic and political inequalities mutually reinforcing one another." (WDR, 2006: 228). As suggested by Checchi et al. (2010) "inequality traps represent severe constraints to future perspectives of growth of an

economy, by preventing entire groups from participation into economic and social life." As income inequality increases, wealthier parents are able to invest more in their children's education and enrichment, increasing the already existing difference in investment from those at the other end of the earning distribution. Social exclusion of some people is a relatively new concept defining a complex and multidimensional phenomenon. In the "GINI Country Report: Italy" social exclusion is defined as "the outcome of a very complex process in which a variety of causes act together. Social exclusion relates to being unable to enjoy levels of participation that most of society takes for granted" (Ballarino et al. 2012: 240). If inequality traps exist, then the positive impact for economic growth improving the condition of those disadvantaged is reduced. As explained in the World Social Report (UN, 2013), similar inequalities hamper the ability of some to fully share the benefits of growth. In turn, these developments can lower growth rates. If a society presents inequality traps, it is likely to be a divided society. It is largely documented that inequality and poverty appear to be among the main explanations for crime and violence. If advantages and disadvantages are based on backgrounds, then it will likely breed segregation, mistrust and resentments. Social unrest, corruption and violence generate instability that hinders development because insecurity affects investment decisions and growth as a result. Alesina and Perotti (1996) investigate the link between wide inequality and political instability, and the way in which this affects growth.

A society that presents both wide inequality of income and intergenerational social mobility is a society that does not provide its members with opportunities to develop their talent differently and efficiently. In such a case, there will be inefficiency in human capital investments and in human resource allocations that, in turn, might negatively affect the efficiency and the development of a society.

Conclusion

The thesis contributed in elucidating the Italian social mobility pattern compared with other countries. It further presents that Italy cannot be possibly described as a fully meritocratic and open society. Undeniably, individuals' outcomes are consistently influenced by family background. Educational attainments, occupational careers and the related income are often influenced by parents' occupation, level of education and income. In studying the principal factors promoting, or hampering, social mobility lead to the discovery of the main specificities of the Italian society. Sociocultural, economic and institutional factors interplay between each other in conceiving a system not inclined to reward and to incentive individual efforts. Intergenerational mobility is based on increased equal opportunity. If the latter is not respected, circumstances, such as family background, prevail over efforts. Inequalities due to circumstances beyond an individual's control are worrisome for both ethical reasons as well as efficiency reasons. To establish social mobility, equality of opportunity should be guaranteed in education as well as in the labour market. Equality in opportunity is proven to result in efficient human capital investments and efficient allocation of human resources. As a consequence, by establishing social mobility, the results appear to be beneficial for a country's development. Additionally, the thesis analysed the relevance of inequality of income for social mobility. It followed that wide income inequality may negatively affect social mobility, reinforcing the relevance of circumstance over efforts. Intuitions are partially confirmed by empirical evidence. As a matter of fact, the Great Gatsby curve related the two dimensions, and concluded that countries with a greater unequal income distribution seem to be, simultaneously, the least mobile. Italy is one such country where a near identical correlation is confirmed. Inequality and immobility established the so-called "inequality trap", signifying that advantages and disadvantages are transmitted across generations and such situations have proven to be inefficient for a country's development.

The first chapter defined social mobility in its different dimensions and it paid considerable attention to the different indicators that can be utilised in assessing social mobility. In addition, the first chapter it gave particular attention to occupational mobility. In comparison with other developed nations, Italy distinguished herself for her

high rate of absolute mobility, thus representing movement across occupational class as a consequence of transformation in the occupational structure. Veritably, Italy progressed from being an agricultural economy to an industrialized and post industrialized economy. High rates of absolute mobility account for a general decline in the farming sector and in the unskilled manual class. On the contrary, as far as relative mobility is concerned, Italy ranked among the least fluid societies; it established that the chances of being found in one socioeconomic position, rather than another, are not equally distributed for everybody, regardless of social origins. The weight of social inheritance in Italy reduced over the twentieth century. However, family backgrounds persist in exerting a role for an individual's future destination, and consequentially there exists a high propensity for individuals to follow in their father's footsteps. By studying log-lineal models and odds ratios, numerous studies adequately measured the advantages or disadvantages of arriving in a determinate class position related to the class of origins. Parameters indicated that currently, as historically, the class positions assumed by Italians are strongly conditioned by their classes of origin. The chances of arriving in a privileged occupational class and the risk of arriving in a disadvantaged one are strongly conditioned by the socioeconomic origins. Through such studies, Italy consistently emerged as not being a meritocratic society.

The second chapter coherently elucidated the factors and the mechanisms that underpin these low levels of social mobility. Social mobility is interpreted as a function that depends on non-economic, institutional, economic factors as well as the interaction between economic and social factors. As far as the non-economic causes are concerned, it became apparent that the sociocultural environments in which children are raised affect their future development. The chapter established that individuals coming from higher educated parents have higher competencies, attend higher levels of education and excel academically, as opposed to children born from lower educated parents. In Italy, the influence of family and local community upon child development appears to be considerably relevant, also due to the fact that individuals remain for an extended period of time in the family household. By analysing the institutional factors, family proved to be rather influential in children educational achievements and performance. The early school tracking, that characterizes the Italian society, contributes in making family considerably influential. Moreover, Italy results to display low levels of intergenerational educational mobility; thereby children tend to achieve similar levels of

education of those achieved by their parents. Lowly educated and low-income families are discovered to be those investing less in education, regardless if Italy's education is public. By studying the economic factors, it emerges that beyond the direct cost of schooling there exist opportunity costs of not working. Subsequently this can influence investment decisions of those with few economic resources. Less privileged parents often prefer to see their children become independent earlier on, thus tracking them into quick, or more vocationally oriented, educational lines. This is substantially more probable if there are no adequate returns to human capital investments. Much research is emphasized on education being correlated with occupation, however only moderately mediates the overall influence of social origins, such is the case of Italy. This signifies that at parity of schooling level, family background, regardless, is also considered when entering into the labour market. By studying the interaction among economic and social factors, it results to an appearance of widespread use of family ties in lowering barriers to enter in the Italian labour market. Favouritism and nepotistic practices likely affect return from education. In Italy, a so-called "hereditary clause" exists that makes it possible for the transmission of jobs from parents to children.

The third chapter dealt with the concept of social mobility related to equality and efficiency. A society in which exist high levels of social mobility is interpreted to be a society that promotes and respects equality of opportunity. As a result, members of a society can experiment upward and downward mobility, regardless of family background, thus they fairly compete for the desired outcome, having equal chances for success or failure. The chapter concisely reiterated the difference among equality of opportunity and equality of outcome, and their relationship between each other. Thereby, equality of opportunity constitutes for inequality of outcomes as being acceptable, because these inequalities are mainly due to differences in efforts and preference. On the other hand, inequality of outcomes due to circumstances beyond an individual's control, are perceived to be as unacceptable. The chapter established that such inequalities are worrisome, not only on ethical grounds but also on efficiency grounds. Equality of opportunity is studied in relation to education and it clarifies the importance of not limiting individuals' human capital investments. Since it is inherently embodied, there are physiological constraints that limit its accumulation at the individual level. If there exist constraints in educational investments, the equilibrium

result is not maximized because there can be potential loss due to non-optimally developed human resources.

Once individuals invest differently in education they will be endowed with a specific unit of productivity. It has been elucidated that equality of opportunity in the passage from school to employment makes it possible for an efficient allocation of human resources. Indeed, if job positions are filled according to individuals' skills and merits, and external circumstances are not considered, then the allocation is efficient. However, it is presented that family ties may interfere with a genuine process of worker selection, favouring people with connections over more talented workers. It has been coherently demonstrated that in functioning and efficient systems, anonymity rules or procedures should be used in selecting the appropriate worker for a position. Furthermore, the chapter discovered that a labour market with a non-transparent and/or non-meritocratic procedure of selections, reinforces immobility and stratification. If family background is considered, then individuals that invested in human capital accumulation might be unjustifiably refused or inappropriately rewarded. Contrarily, undeserving individuals with less talent may recover important job positions. This is regarded as one cause for job-worker mismatch, in addition to being one cause for inadequate returns from human capital investments. It has been established that if socioeconomic positions are largely influenced by family provenience it contributes in reducing incentive in human capital investments for individuals coming from both high and low socioeconomic families. This likely culminates in retarding or even arresting economic development of a modern nation. The chapter reported some discussion over the possible trade-off between equality and efficiency. Indeed, policies aimed at increasing social mobility may entail output losses. However, long-term prosperity appears to be best achieved by fostering growth and broad participation in that growth, thanks to social mobility. In truth, less mobile societies are likely to waste or misallocate talents. Simultaneously, rapid growth based on innovation and technology should create an environment in which the sorting of individuals should be based on capacity and not on social background.

The last chapter attempts to elucidate social mobility, inequality of income and growth. Growth can create new opportunities, however if social mobility does not exist, then, resultantly, not all members of a society will obtain advantages from it. On the contrary, it could reinforce channels that hamper social mobility. The chapter coherently attempts to analyse whether wide unequal distribution of income may affect social mobility. The

attention shifts onto intergenerational economic mobility, hence the degree of association between parents and offspring's income. There was an emergence in the relevance of income for many other aspects of individuals' lives and its connection with education and occupation. Rich families are often associated with more prestigious employment and higher levels of education. High-income households are shown to spend substantially more on their children's education than low-income households. Empirical studies on the Italian society represented the existence of a relationship between levels of education and fathers' income, with graduates having, on average, richer fathers. Moreover, families might tend to segregate themselves into economically homogenous neighbourhoods and this is a cause of intergenerational persistence. Rising income inequality may influence the opportunity structure, increasing the difficulty for children from less privileged families to compete successfully against children from more privileged families. Furthermore, socioeconomic inequality contributes in negatively influencing the mentality of disadvantaged individuals to not invest in education. Veritably, if individuals internalize beliefs about their own inferiority, they are likely to cut their ambitions short. On the whole, inequality of income in the present is likely to increase the role of family background in future individuals' outcome. There is no consensus on the relation between inequality of income and intergenerational social mobility. Yet some empirical evidence suggests the presence of a correlation. The Great Gatsby Curve relates the two dimensions. It demonstrates that countries with more inequality, at one point in time, also experience less income mobility across the generations. Higher degrees of inequality correspond to lower chances for individuals to improve their position, in comparison to their family background. The relationship cannot be defined as causal, regardless if a rough correlation exists. Italy is one of those countries in which this relation is confirmed. Doubtlessly, in terms of both income inequality and social mobility, Italy has proven to be in a rather negative situation, when compared to other nations, most of which are democratic countries with market economies. Italy appears as one of the most unequal countries in terms of income distribution and recent studies on the degree and pattern of intergenerational economic mobility in Italy assert that intergenerational persistence appears to be high and significant. Moreover, some studies assert that the relationship between income inequality and inter-generational mobility is especially pronounced at the top and at the bottom of the income distribution. Such findings are confirmed by a number of studies

on the Italian society. The children of the very rich appear to be specially protected from downward mobility, while the children of the very poor face barriers to upward mobility. The final section of the chapter dealt with the relationship between inequality and growth. Their relationship is not concise. Efforts to understand their relationship have yielded mixed results. Some assertors of the argument that inequality is good for growth, point out that unequal rewards create incentives for people to invest in more human capital, to be more motivated to try and get ahead the competition. The point is that if there is no social mobility, then there are no structures in which effort and ability are rewarded. As a consequence the possible positive effects of inequality on growth, without social mobility, are offset. Despite it not being possible to comprehensively establish assertion on the effect of large inequality upon growth, it is reasonable to assume that inequality traps, meaning the existence of both large inequality and immobility, represent severe constraints to future perspectives of economic development. In conjunction with inequality traps, the entire distribution is stable. Inequalities are perpetuated over time and across generations, the poor are persistently poor while the rich are persistently rich. Such a situation has been coherently proven to be damaging for economic development.

It is important to conclude in paying attention to the unresolved issue. From the dissertation, the importance of social mobility became considerably apparent in order to fully use the human resources, new engine of growth and development. Simultaneously, the relationship of growth on social mobility is not entirely concise. It has been demonstrated that the process of industrialization led to an increasing rate of absolute mobility. Yet for many authors it did not completely translate into relative mobility, thus exists no consistent reduction of the influence of family background having on individual outcomes. Whereas industrialization undoubtedly transformed economies across the globe, it is still debatable whether industrialized societies are also increasingly open, i.e. characterized by a greater amount of relative social mobility than unindustrialized societies.

Another unresolved issue is clarifying the possible link between rising income inequality and intergenerational social mobility. Currently inequality seems to be positively correlated with its intergenerational transmission, however a causal link between the two variables has not been established. The literature on inequality and intergenerational mobility, for years, has developed in isolation, as a result further

analysis and international comparisons could possibly shed light on this issue. Even more controversial, is the effect of growth on inequality. Efforts to understand their relationship has yielded mixed results. It appears that there is no linear or systematic relationship. In addition, the effect that wide inequality may have on growth has also been subject for lively debate and discussion. Recent literary works indicate the existence of a negative relationship between inequality and growth. However there is no unanimous consensus, and moreover the empirical evidence is inconclusive. Hence, the debate on all these issues is still up for discussion

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