

Merit and Inheritance in the Long Run

The overall importance of capital today, as noted, is not very different from what it was in the eighteenth century. Only its form has changed: capital was once mainly land but is now industrial, financial, and real estate. We also know that the concentration of wealth remains high, although it is noticeably less extreme than it was a century ago. The poorest half of the population still owns nothing, but there is now a patrimonial middle class that owns between a quarter and a third of total wealth, and the wealthiest 10 percent now own only two-thirds of what there is to own rather than nine-tenths. We have also learned that the relative movements of the return on capital and the rate of growth of the economy, and therefore of the difference between them, $r - g$, can explain many of the observed changes, including the logic of accumulation that accounts for the very high concentration of wealth that we see throughout much of human history.

In order to understand this cumulative logic better, we must now take a closer look at the long-term evolution of the relative roles of inheritance and saving in capital formation. This is a crucial issue, because a given level of capital concentration can come about in totally different ways. It may be that the global level of capital has remained the same but that its deep structure has changed dramatically, in the sense that capital was once largely inherited but is now accumulated over the course of a lifetime by savings from earned income. One possible explanation for such a change might be increased life expectancy, which might have led to a structural increase in the accumulation of capital in anticipation of retirement. However, this supposed great transformation in the nature of capital was actually less dramatic than is sometimes thought; indeed, in some countries it did not occur at all. In all likelihood, inheritance will again play a significant role in the twenty-first century, comparable to its role in the past.

More precisely, I will come to the following conclusion. Whenever the rate of return on capital is significantly and durably higher than the growth

rate of the economy, it is all but inevitable that inheritance (of fortunes accumulated in the past) predominates over saving (wealth accumulated in the present). In strict logic, it could be otherwise, but the forces pushing in this direction are extremely powerful. The inequality $r > g$ in one sense implies that the past tends to devour the future: wealth originating in the past automatically grows more rapidly, even without labor, than wealth stemming from work, which can be saved. Almost inevitably, this tends to give lasting, disproportionate importance to inequalities created in the past, and therefore to inheritance.

If the twenty-first century turns out to be a time of low (demographic and economic) growth and high return on capital (in a context of heightened international competition for capital resources), or at any rate in countries where these conditions hold true, inheritance will therefore probably again be as important as it was in the nineteenth century. An evolution in this direction is already apparent in France and a number of other European countries, where growth has already slowed considerably in recent decades. For the moment it is less prominent in the United States, essentially because demographic growth there is higher than in Europe. But if growth ultimately slows more or less everywhere in the coming century, as the median demographic forecasts by the United Nations (corroborated by other economic forecasts) suggest it will, then inheritance will probably take on increased importance throughout the world.

This does not imply, however, that the structure of inequality in the twenty-first century will be the same as in the nineteenth century, in part because the concentration of wealth is less extreme (there will probably be more small to medium rentiers and fewer extremely wealthy rentiers, at least in the short term), in part because the earned income hierarchy is expanding (with the rise of the supermanager), and finally because wealth and income are more strongly correlated than in the past. In the twenty-first century it is possible to be both a supermanager and a "medium rentier": the new meritocratic order encourages this sort of thing, probably to the detriment of low- and medium-wage workers, especially those who own only a tiny amount of property, if any.

Inheritance Flows over the Long Run

I will begin at the beginning. In all societies, there are two main ways of accumulating wealth: through work or inheritance.¹ How common is each of these in the top centiles and deciles of the wealth hierarchy? This is the key question.

In Vautrin's lecture to Rastignac (discussed in Chapter 7), the answer is clear: study and work cannot possibly lead to a comfortable and elegant life, and the only realistic strategy is to marry Mademoiselle Victorine and her inheritance. One of my primary goals in this work is to find out how closely nineteenth-century French society resembled the society described by Vautrin and above all to learn how and why this type of society evolved over time.

It is useful to begin by examining the evolution of the annual flow of inheritances over the long run, that is, the total value of bequests (and gifts between living individuals) during the course of a year, expressed as a percentage of national income. This figure measures the annual amount of past wealth conveyed each year relative to the total income earned that year. (Recall that earned income accounts for roughly two-thirds of national income each year, while part of capital income goes to remunerate the capital that is passed on to heirs.)

I will examine the French case, which is by far the best known over the long run, and the pattern I find there, it turns out, also applies to a certain extent to other European countries. Finally, I will explore what it is possible to say at the global level.

Figure 11.1 represents the evolution of the annual inheritance flow in France from 1820 to 2010.² Two facts stand out clearly. First, the inheritance flow accounts for 20–25 percent of annual income every year in the nineteenth century, with a slight upward trend toward the end of the century. This is an extremely high flow, as I will show later, and it reflects the fact that nearly all of the capital stock came from inheritance. If inherited wealth is omnipresent in nineteenth-century novels, it was not only because writers, especially the debt-ridden Balzac, were obsessed by it. It was above all because inheritance occupied a structurally central place in nineteenth-century society—central as both economic flow and social force. Its importance did not diminish with time, moreover. On the contrary, in 1900–1910, the flow of inheritance was somewhat higher (25 percent of national income compared with barely 20)

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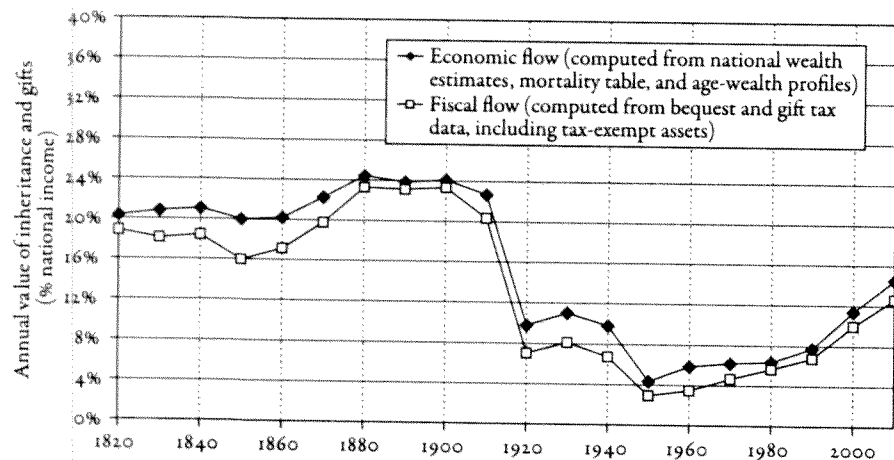


FIGURE 11.1. The annual inheritance flow as a fraction of national income, France, 1820–2010

The annual inheritance flow was about 20–25 percent of national income during the nineteenth century and until 1914; it then fell to less than 5 percent in the 1950s, and returned to about 15 percent in 2010.

Sources and series: see piketty.pse.ens.fr/capital21c.

than it had been in the 1820s, the period of Vautrin, Rastignac, and the Vauquer boardinghouse.

Subsequently, we find a spectacular decrease in the flow of inheritances between 1910 and 1950 followed by a steady rebound thereafter, with an acceleration in the 1980s. There were very large upward and downward variations during the twentieth century. The annual flow of inheritances and gifts was (to a first approximation, and compared with subsequent shocks) relatively stable until World War I but fell by a factor of 5 or 6 between 1910 and 1950 (when the inheritance flow was barely 4 or 5 percent of national income), after which it increased by a factor of 3 or 4 between 1950 and 2010 (at which time the flow accounted for 15 percent of national income).

The evolution visible in Figure 11.1 reflects deep changes in the perception as well as the reality of inheritance, and to a large extent it also reflects changes in the structure of inequality. As we will soon see, the compression of the inheritance flow owing to the shocks of 1914–1945 was nearly twice as great as the decrease in private wealth. The inheritance collapse was therefore not

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simply the result of a wealth collapse (even if the two developments are obviously closely related). In the public mind, the idea that the age of inheritance was over was certainly even more influential than the idea of an end of capitalism. In 1950–1960, bequests and gifts accounted for just a few points of national income, so it was reasonable to think that inheritances had virtually disappeared and that capital, though less important overall than in the past, was now wealth that an individual accumulated by effort and saving during his or her lifetime. Several generations grew up under these conditions (even if perceptions somewhat exceeded reality), in particular the baby boom generation, born in the late 1940s and early 1950s, many of whom are still alive today, and it was natural for them to assume that this was the “new normal.”

Conversely, younger people, in particular those born in the 1970s and 1980s, have already experienced (to a certain extent) the important role that inheritance will once again play in their lives and the lives of their relatives and friends. For this group, for example, whether or not a child receives gifts from parents can have a major impact in deciding who will own property and who will not, at what age, and how extensive that property will be—in any case, to a much greater extent than in the previous generation. Inheritance is playing a larger part in their lives, careers, and individual and family choices than it did with the baby boomers. The rebound of inheritance is still incomplete, however, and the evolution is still under way (the inheritance flow in 2000–2010 stood at a point roughly midway between the nadir of the 1950s and the peak of 1900–1910). To date, it has had a less profound impact on perceptions than the previous change, which still dominates people’s thinking. A few decades from now, things may be very different.

Fiscal Flow and Economic Flow

Several points about Figure 11.1 need to be clarified. First, it is essential to include gifts between living individuals (whether shortly before death or earlier in life) in the flow of inheritance, because this form of transmission has always played a very important role in France and elsewhere. The relative magnitude of gifts and bequests has varied greatly over time, so omitting gifts would seriously bias the analysis and distort spatial and temporal comparisons. Fortunately, gifts in France are carefully recorded (though no doubt somewhat underestimated). This is not the case everywhere.

Second, and even more important, the wealth of French historical sources allows us to calculate inheritance flows in two different ways, using data and methods that are totally independent. What we find is that the two evolutions shown in Figure 11.1 (which I have labeled “fiscal flow” and “economic flow”) are highly consistent, which is reassuring and demonstrates the robustness of the historical data. This consistency also helps us to decompose and analyze the various forces at work.³

Broadly speaking, there are two ways to estimate inheritance flows in a particular country. One can make direct use of observed flows of inheritances and gifts (for example, by using tax data: this is what I call the “fiscal flow”). Or one can look at the private capital stock and calculate the theoretical flow that must have occurred in a given year (which I call the “economic flow”). Each method has its advantages and disadvantages. The first method is more direct, but the tax data in many countries are so incomplete that the results are not always satisfactory. In France, as noted previously, the system for recording bequests and gifts was established exceptionally early (at the time of the Revolution) and is unusually comprehensive (in theory it covers all transmissions, including those on which little or no tax is paid, though there are some exceptions), so the fiscal method can be applied. The tax data must be corrected, however, to take account of small bequests that do not have to be declared (the amounts involved are insignificant) and above all to correct for certain assets that are exempt from the estate tax, such as life insurance contracts, which have become increasingly common since 1970 (and today account for nearly one-sixth of total private wealth in France).

The second method (“economic flow”) has the advantage of not relying on tax data and therefore giving a more complete picture of the transmission of wealth, independent of the vagaries of different countries’ tax systems. The ideal is to be able to use both methods in the same country. What is more, one can interpret the gap between the two curves in Figure 11.1 (which shows that the economic flow is always a little greater than the fiscal flow) as an estimate of tax fraud or deficiencies of the probate record-keeping system. There may also be other reasons for the gap, including the many imperfections in the available data sets and the methods used. For certain subperiods, the gap is far from negligible. The long-run evolutions in which I am primarily interested are nevertheless quite consistent, regardless of which method we use.

The Three Forces: The Illusion of an End of Inheritance

In fact, the main advantage of the economic flow approach is that it requires us to take a comprehensive view of the three forces that everywhere determine the flow of inheritance and its historical evolution.

In general, the annual economic flow of inheritances and gifts, expressed as a proportion of national income that we denote b_y , is equal to the product of three forces:

$$b_y = \mu \times m \times \beta,$$

where β is the capital/income ratio (or, more precisely, the ratio of total private wealth, which, unlike public assets, can be passed on by inheritance, to national income), m is the mortality rate, and μ is the ratio of average wealth at time of death to average wealth of living individuals.

This decomposition is a pure accounting identity: by definition, it is always true in all times and places. In particular, this is the formula I used to estimate the economic flow depicted in Figure 11.1. Although this decomposition of the economic flow into three forces is a tautology, I think it is a useful tautology in that it enables us to clarify an issue that has been the source of much confusion in the past, even though the underlying logic is not terribly complex.

Let me examine the three forces one by one. The first is the capital/income ratio β . This force expresses a truism: if the flow of inherited wealth is to be high in a given society, the total stock of private wealth capable of being inherited must also be large.

The second force, the mortality rate m , describes an equally transparent mechanism. All other things being equal, the higher the mortality rate, the higher the inheritance flow. In a society where everyone lives forever, so that the mortality rate is exactly zero, inheritance must vanish. The inheritance flow b_y must also be zero, no matter how large the capital/income ratio β is.

The third force, the ratio μ of average wealth at time of death to average wealth of living individuals, is equally transparent.⁴

Suppose that the average wealth at time of death is the same as the average wealth of the population as a whole. Then $\mu = 1$, and the inheritance flow b_y is simply the product of the mortality rate m and the capital/income ratio β . For

example, if the capital/income ratio is 600 percent (that is, the stock of private wealth represents six years of national income) and the mortality rate of the adult population is 2 percent,⁵ then the annual inheritance flow will automatically be 12 percent of national income.

If average wealth at time of death is twice the average wealth of the living, so that $\mu = 2$, then the inheritance flow will be 24 percent of national income (assuming $\beta = 6$ and $m = 2$ percent), which is approximately the level observed in the nineteenth and early twentieth centuries.

Clearly, μ depends on the age profile of wealth. The more wealth increases with age, the higher μ will be and therefore the larger the inheritance flow.

Conversely, in a society where the primary purpose of wealth is to finance retirement and elderly individuals consume the capital accumulated during their working lives in their years of retirement (by drawing down savings in a pension fund, for example), in accordance with the "life-cycle theory of wealth" developed by the Italian-American economist Franco Modigliani in the 1950s, then by construction μ will be almost zero, since everyone aims to die with little or no capital. In the extreme case $\mu = 0$, inheritance vanishes regardless of the values of β and m . In strictly logical terms, it is perfectly possible to imagine a world in which there is considerable private capital (so β is very high) but most wealth is in pension funds or equivalent forms of wealth that vanish at death ("annuitized wealth"), so that the inheritance flow is zero or close to it. Modigliani's theory offers a tranquil, one-dimensional view of social inequality: inequalities of wealth are nothing more than a translation in time of inequalities with respect to work. (Managers accumulate more retirement savings than workers, but both groups consume all their capital by the time they die.) This theory was quite popular in the decades after World War II, when functionalist American sociology, exemplified by the work of Talcott Parsons, also depicted a middle-class society of managers in which inherited wealth played virtually no role.⁶ It is still quite popular today among baby boomers.

Our decomposition of the inheritance flow as the product of three forces ($b_i = \mu \times m \times \beta$) is important for thinking historically about inheritance and its evolution, for each of the three forces embodies a significant set of beliefs and arguments (perfectly plausible a priori) that led many people to imagine, especially during the optimistic decades after World War II, that the end (or at any rate gradual and progressive decrease) of inherited wealth was some-

how the logical and natural culmination of history. However, such a gradual end to inherited wealth is by no means inevitable, as the French case clearly illustrates. Indeed, the U-shaped curve we see in France is a consequence of three U-shaped curves describing each of the three forces, μ , m , and β . Furthermore, the three forces acted simultaneously, in part for accidental reasons, and this explains the large amplitude of the overall change, and in particular the exceptionally low level of inheritance flow in 1950–1960, which led many people to believe that inherited wealth had virtually disappeared.

In Part Two I showed that the capital/income ratio β was indeed described by a U-shaped curve. The optimistic belief associated with this first force is quite clear and at first sight perfectly plausible: inherited wealth has tended over time to lose its importance simply because wealth has lost its importance (or, more precisely, wealth in the sense of nonhuman capital, that is, wealth that can be owned, exchanged on a market, and fully transmitted to heirs under the prevailing laws of property). There is no logical reason why this optimistic belief cannot be correct, and it permeates the whole modern theory of human capital (including the work of Gary Becker), even if it is not always explicitly formulated.⁷ However, things did not unfold this way, or at any rate not to the degree that people sometimes imagine: landed capital became financial and industrial capital and real estate but retained its overall importance, as can be seen in the fact that the capital/income ratio seems to be about to regain the record level attained in the Belle Époque and earlier.

For partly technological reasons, capital still plays a central role in production today, and therefore in social life. Before production can begin, funds are needed for equipment and office space, to finance material and immaterial investments of all kinds, and of course to pay for housing. To be sure, the level of human skill and competence has increased over time, but the importance of nonhuman capital has increased proportionately. Hence there is no obvious a priori reason to expect the gradual disappearance of inherited wealth on these grounds.

Mortality over the Long Run

The second force that might explain the natural end of inheritance is increased life expectancy, which lowers the mortality rate m and increases the time to inheritance (which decreases the size of the legacy). Indeed, there is

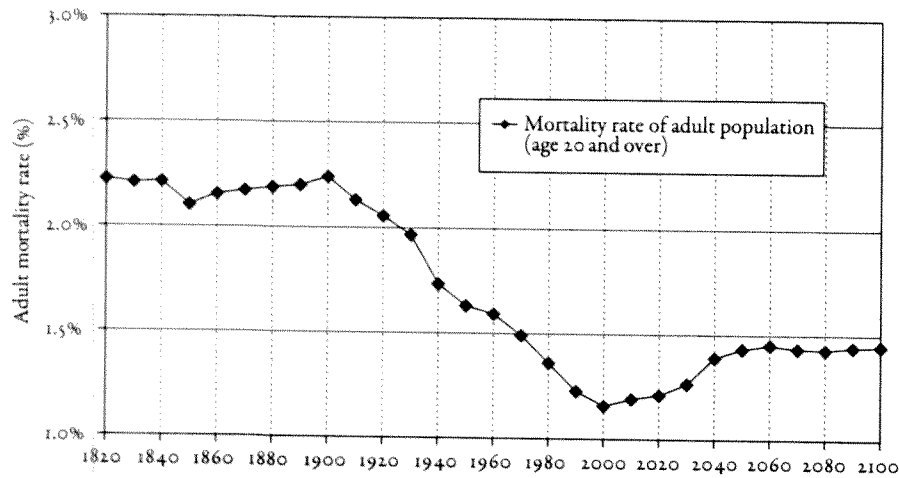


FIGURE 11.2. The mortality rate in France, 1820–2100

The mortality rate fell in France during the twentieth century (rise of life expectancy), and should increase somewhat during the twenty-first century (baby-boom effect).

Sources and series: see piketty.pse.ens.fr/capital21c.

no doubt that the mortality rate has decreased over the long run: the proportion of the population that dies each year is smaller when the life expectancy is eighty than when it is sixty. Other things being equal, for a given β and μ , a society with a lower mortality rate is also a society in which the flow of inheritance is a smaller proportion of national income. In France, the mortality rate has declined inexorably over the course of history, and the same is true of other countries. The French mortality rate was around 2.2 percent (of the adult population) in the nineteenth century but declined steadily throughout the twentieth century,⁸ dropping to 1.1–1.2 percent in 2000–2010, a decrease of almost one-half in a century (see Figure 11.2).

It would be a serious mistake, however, to think that changes in the mortality rate lead inevitably to the disappearance of inherited wealth as a major factor in the economy. For one thing, the mortality rate began to rise again in France in 2000–2010, and according to official demographic forecasts this increase is likely to continue until 2040–2050, after which adult mortality should stabilize at around 1.4–1.5 percent. The explanation for this is that the baby boomers, who outnumber previous cohorts (but are about the same size as subsequent ones), will reach the end of their life

spans in this period.⁹ In other words, the baby boom, which led to a structural increase in the size of birth cohorts, temporarily reduced the mortality rate simply because the population grew younger and larger. French demographics are fortunately quite simple, so that it is possible to present the principal effects of demographic change in a clear manner. In the nineteenth century, the population was virtually stationary, and life expectancy was about sixty years, so that the average person enjoyed a little over forty years of adulthood, and the mortality rate was therefore close to $1/40$, or actually about 2.2 percent. In the twenty-first century, the population, according to official forecasts, will likely stabilize again, with a life expectancy of about eighty-five years, or about sixty-five years of adult life, giving a mortality rate of about $1/65$ in a static population, which translates into 1.4–1.5 percent when we allow for slight demographic growth. Over the long run, in a developed country with a quasi-stagnant population like France (where population increase is primarily due to aging), the decrease in the adult mortality rate is about one-third.

The anticipated increase in the mortality rate between 2000–2010 and 2040–2050 due to the aging of the baby boom generation is admittedly a purely mathematical effect, but it is nevertheless important. It partly explains the low inheritance flows of the second half of the twentieth century, as well as the expected sharp increase in these flows in the decades to come. This effect will be even stronger elsewhere. In countries where the population has begun to decrease significantly or will soon do so (owing to a decrease in cohort size)—most notably Germany, Italy, Spain, and of course Japan—this phenomenon will lead to a much larger increase in the adult mortality rate in the first half of the twenty-first century and thus automatically increase inheritance flows by a considerable amount. People may live longer, but they still die eventually; only a significant and steady increase in cohort size can permanently reduce the mortality rate and inheritance flow. When an aging population is combined with a stabilization of cohort size as in France, however, or even a reduced cohort size as in a number of rich countries, very high inheritance flows are possible. In the extreme case—a country in which the cohort size is reduced by half (because each couple decides to have only one child), the mortality rate, and therefore the inheritance flow, could rise to unprecedented levels. Conversely, in a country where the size of each age cohort doubles every generation, as happened in many

countries in the twentieth century and is still happening in Africa, the mortality rate declines to very low levels, and inherited wealth counts for little (other things equal).

Wealth Ages with Population: The $\mu \times m$ Effect

Let us now forget the effects of variations in cohort size: though important, they are essentially transitory, unless we imagine that in the long run the population of the planet grows infinitely large or infinitely small. Instead, I will adopt the very long-run perspective and assume that cohort size is stable. How does increased life expectancy really affect the importance of inherited wealth? To be sure, a longer life expectancy translates into a structural decrease in the mortality rate. In France, where the average life expectancy in the twenty-first century will be eight to eighty-five years, the adult mortality rate will stabilize at less than 1.5 percent a year, compared with 2.2 percent in the nineteenth century, when the life expectancy was just over sixty. The increase in the average age of death inevitably gives rise to a similar increase in the average age of heirs at the moment of inheritance. In the nineteenth century, the average age of inheritance was just thirty; in the twenty-first century it will be somewhere around fifty. As Figure 11.3 shows, the difference between the average age of death and the average age of inheritance has always been around thirty years, for the simple reason that the average age of child-birth (often referred to as “generational duration”) has been relatively stable at around thirty over the long run (although there has been a slight increase in the early twenty-first century).

But does the fact that people die later and inherit later imply that inherited wealth is losing its importance? Not necessarily, in part because the growing importance of gifts between living individuals has partly compensated for this aging effect, and in part because it may be that people are inheriting later but receiving larger amounts, since wealth tends to age in an aging society. In other words, the downward trend in the mortality rate—ineluctable in the very long run—can be compensated by a similar structural increase in the relative wealth of older people, so that the product $\mu \times m$ remains unchanged or in any case falls much more slowly than some have believed. This is precisely what happened in France: the ratio μ of average wealth at death to aver-

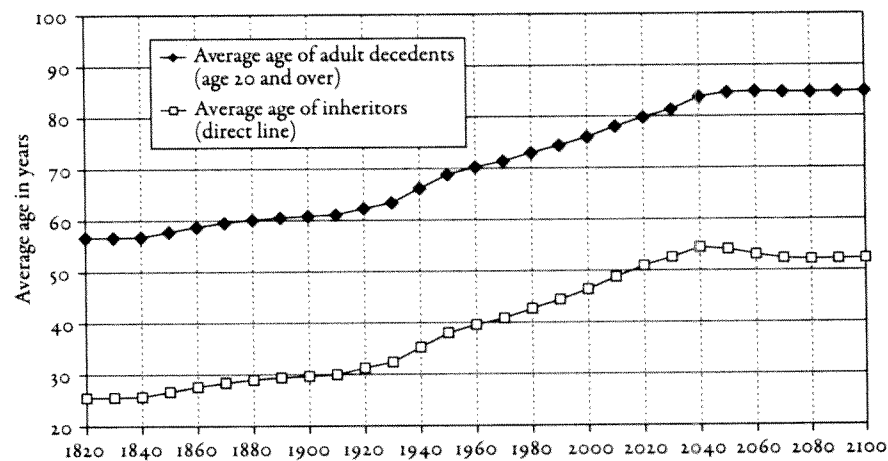


FIGURE 11.3. Average age of decedents and inheritors: France, 1820–2100

The average of (adult) decedents rose from less than 60 years to almost 80 years during the twentieth century, and the average age at the time of inheritance rose from 30 years to 50 years.

Sources and series: see piketty.pse.ens.fr/capital21c.

age wealth of the living rose sharply after 1950–1960, and this gradual aging of wealth explains much of the increased importance of inherited wealth in recent decades.

Concretely, one finds that the product $\mu \times m$, which by definition measures the annual rate of transmission by inheritance (or, in other words, the inheritance flow expressed as a percentage of total private wealth), clearly began to rise over the past few decades, despite the continuing decrease in the mortality rate, as Figure 11.4 shows. The annual rate of transmission by inheritance, which nineteenth-century economists called the “rate of estate devolution,” was according to my sources relatively stable from the 1820s to the 1910s at around 3.3–3.5 percent, or roughly $1/30$. It was also said in those days that a fortune was inherited on average once every thirty years, that is, once a generation, which is a somewhat too static view of things but partially justified by the reality of the time.¹⁰ The transmission rate decreased sharply in the period 1910–1950 and in the 1950s stood at about 2 percent, before rising steadily to above 2.5 percent in 2000–2010.

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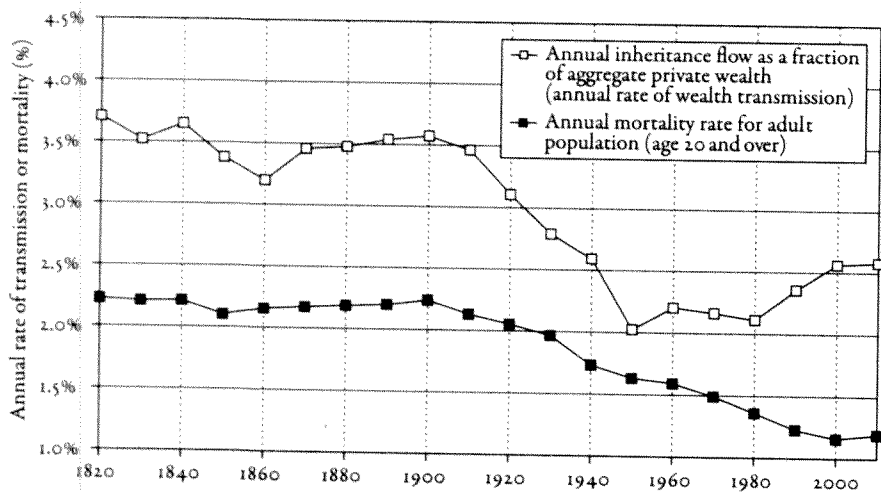


FIGURE 11.4. Inheritance flow versus mortality rate: France, 1820–2010
The annual flow of inheritance (bequests and gifts) is equal to about 2.5 percent of aggregate wealth in 2000–2010 versus 1.2 percent for the mortality rate.
Sources and series: see piketty.pse.ens.fr/capital21c.

To sum up: inheritance occurs later in aging societies, but wealth also ages, and the latter tends to compensate the former. In this sense, a society in which people die older is very different from a society in which they don't die at all and inheritance effectively vanishes. Increased life expectancy delays important life events: people study longer, start work later, inherit later, retire later, and die later. But the relative importance of inherited wealth as opposed to earned income does not necessarily change, or at any rate changes much less than people sometimes imagine. To be sure, inheriting later in life may make choosing a profession more frequently necessary than in the past. But this is compensated by the inheritance of larger amounts or by the receipt of gifts. In any case, the difference is more one of degree than the dramatic change of civilization that is sometimes imagined.

Wealth of the Dead, Wealth of the Living

It is interesting to take a closer look at the evolution of μ , the ratio between average wealth at death and average wealth of the living, which I have pre-

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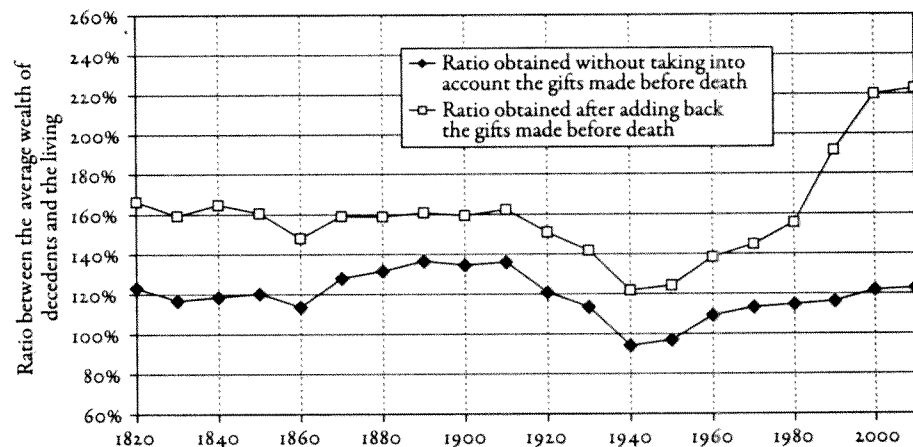


FIGURE 11.5. The ratio between average wealth at death and average wealth of the living: France, 1820–2010

In 2000–2010, the average wealth at death is 20 percent higher than that of the living if one omits the gifts that were made before death, but more than twice as large if one re-integrates gifts.
Sources and series: see piketty.pse.ens.fr/capital21c.

sented in Figure 11.5. Note, first, that over the course of the past two centuries, from 1820 to the present, the dead have always been (on average) wealthier than the living in France: μ has always been greater than 100 percent, except in the period around World War II (1940–1950), when the ratio (without correcting for gifts made prior to death) fell to just below 100 percent. Recall that according to Modigliani's life-cycle theory, the primary reason for amassing wealth, especially in aging societies, is to pay for retirement, so that older individuals should consume most of their savings during old age and should therefore die with little or no wealth. This is the famous "Modigliani triangle," taught to all students of economics, according to which wealth at first increases with age as individuals accumulate savings in anticipation of retirement and then decreases. The ratio μ should therefore be equal to zero or close to it, in any case much less than 100 percent. But this theory of capital and its evolution in advanced societies, which is perfectly plausible a priori, cannot explain the observed facts—to put it mildly. Clearly, saving for retirement is only one of many reasons—and not the most important reason—why people accumulate wealth: the desire to

perpetuate the family fortune has always played a central role. In practice, the various forms of annuitized wealth, which cannot be passed on to descendants, account for less than 5 percent of private wealth in France and at most 15–20 percent in the English-speaking countries, where pension funds are more developed. This is not a negligible amount, but it is not enough to alter the fundamental importance of inheritance as a motive for wealth accumulation (especially since life-cycle savings may not be a substitute for but rather a supplement to transmissible wealth).¹¹ To be sure, it is quite difficult to say how different wealth accumulation would have been in the twentieth century in the absence of pay-as-you-go public pension systems, which guaranteed the vast majority of retirees a decent standard of living in a more reliable and equitable way than investment in financial assets, which plummeted after the war, could have done. It is possible that without such public pension systems, the overall level of wealth accumulation (measured by the capital/income ratio) would have been even greater than it is today.¹² In any case, the capital/income ratio is approximately the same today as it was in the Belle Époque (when a shorter life expectancy greatly reduced the need to accumulate savings in anticipation of retirement), and annuitized wealth accounts for only a slightly larger portion of total wealth than it did a century ago.

Note also the importance of gifts between living individuals over the past two centuries, as well as their spectacular rise over the past several decades. The total annual value of gifts was 30–40 percent of the annual value of inheritances from 1820 to 1870 (during which time gifts came mainly in the form of dowries, that is, gifts to the spouse at the time of marriage, often with restrictions specified in the marriage contract). Between 1870 and 1970 the value of gifts decreased slightly, stabilizing at about 20–30 percent of inheritances, before increasing strongly and steadily to 40 percent in the 1980s, 60 percent in the 1990s, and more than 80 percent in 2000–2010. Today, transmission of capital by gift is nearly as important as transmission by inheritance. Gifts account for almost half of present inheritance flows, and it is therefore essential to take them into account. Concretely, if gifts prior to death were not included, we would find that average wealth at death in 2000–2010 was just over 20 percent higher than average wealth of the living. But this is simply a reflection of the fact that the dead have already passed on nearly half of their assets. If we include gifts made prior to death, we find that the (corrected) value of μ is actually greater than 220 percent: the corrected wealth of

the dead is nearly twice as great as that of the living. We are once again living in a golden age of gift giving, much more so than in the nineteenth century.

It is interesting to note that the vast majority of gifts, today as in the nineteenth century, go to children, often in the context of a real estate investment, and they are given on average about ten years before the death of the donor (a gap that has remained relatively stable over time). The growing importance of gifts since the 1970s has led to a decrease in the average age of the recipient: in 2000–2010, the average age of an heir is forty-five to fifty, while that of the recipient of a gift is thirty-five to forty, so that the difference between today and the nineteenth or early twentieth centuries is not as great as it seems from Figure 11.3.¹³ The most convincing explanation of this gradual and progressive increase of gift giving, which began in the 1970s, well before fiscal incentives were put in place in 1990–2000, is that parents with means gradually became aware that owing to the increase in life expectancy, there might be good reasons to share their wealth with their children at the age of thirty-five to forty rather than forty-five to fifty or even later. In any case, whatever the exact role of each of the various possible explanations, the fact is that the upsurge in gift giving, which we also find in other European countries, including Germany, is an essential ingredient in the revived importance of inherited wealth in contemporary society.

The Fifties and the Eighties: Age and Fortune in the Belle Époque

In order to better understand the dynamics of wealth accumulation and the detailed data used to calculate μ , it is useful to examine the evolution of the average wealth profile as a function of age. Table 11.1 presents wealth-age profiles for a number of years between 1820 and 2010.¹⁴ The most striking fact is no doubt the impressive aging of wealth throughout the nineteenth century, as capital became increasingly concentrated. In 1820, the elderly were barely wealthier on average than people in their fifties (which I have taken as a reference group): sexagenarians were 34 percent wealthier and octogenarians 53 percent wealthier. But the gaps widened steadily thereafter. By 1900–1910, the average wealth of sexagenarians and septuagenarians was on the order of 60–80 percent higher than the reference group, and octogenarians were two and a half times wealthier. Note that these are averages for all of France. If we restrict our attention to Paris, where the largest fortunes were concentrated, the situation is even more extreme. On the eve of World War I, Parisian fortunes swelled with

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TABLE 11.1.

The age-wealth profile in France, 1820–2010: Average wealth of each age group (% of average wealth of 50- to 59-year-olds)

Year	20–29 years	30–39 years	40–49 years	50–59 years	60–69 years	70–79 years	80 years and over
1820	29	37	47	100	134	148	153
1850	28	37	52	100	128	144	142
1880	30	39	61	100	148	166	220
1902	26	57	65	100	172	176	238
1912	23	54	72	100	158	178	257
1931	22	59	77	100	123	137	143
1947	23	52	77	100	99	76	62
1960	28	52	74	100	110	101	87
1984	19	55	83	100	118	113	105
2000	19	46	66	100	122	121	118
2010	25	42	74	100	111	106	134

Note: In 1820, the average wealth of individuals aged 60–69 was 34% higher than that of 50- to 59-year-olds, and the average wealth of those aged 80 and over was 53% higher than that of 50- to 59-year-olds.

Sources: See piketty.pse.ens.fr/capital21c, table 2.

age, with septuagenarians and octogenarians on average three or even four times as wealthy as fifty-year-olds.¹⁵ To be sure, the majority of people died with no wealth at all, and the absence of any pension system tended to aggravate this “golden-age poverty.” But among the minority with some fortune, the aging of wealth is quite impressive. Quite clearly, the spectacular enrichment of octogenarians cannot be explained by income from labor or entrepreneurial activity: it is hard to imagine people in their eighties creating a new startup every morning.

This enrichment of the elderly is striking, in part because it explains the high value of μ , the ratio of average wealth at time of death to average wealth of the living, in the Belle Époque (and therefore the high inheritance flows), and even more because it tells us something quite specific about the underlying economic process. The individual data we have are quite clear on this point: the very rapid increase of wealth among the elderly in the late nine-

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teenth and early twentieth centuries was a straightforward consequence of the inequality $r > g$ and of the cumulative and multiplicative logic it implies. Concretely, elderly people with the largest fortunes often enjoyed capital incomes far in excess of what they needed to live. Suppose, for example, that they obtained a return of 5 percent and consumed two-fifths of their capital income while reinvesting the other three-fifths. Their wealth would then have grown at a rate of 3 percent a year, and by the age of eighty-five they would have been more than twice as rich as they were at age sixty. The mechanism is simple but extremely powerful, and it explains the observed facts very well, except that the people with the largest fortunes could often save more than three-fifths of their capital income (which would have accelerated the divergence process), and the general growth of mean income and wealth was not quite zero (but about 1 percent a year, which would have slowed it down a bit).

The study of the dynamics of accumulation and concentration of wealth in France in 1870–1914, especially in Paris, has many lessons to teach about the world today and in the future. Not only are the data exceptionally detailed and reliable, but this period is also emblematic of the first globalization of trade and finance. As noted, it had modern, diversified capital markets, and individuals held complex portfolios consisting of domestic and foreign, public and private assets paying fixed and variable amounts. To be sure, economic growth was only 1–1.5 percent a year, but such a growth rate, as I showed earlier, is actually quite substantial from a generational standpoint or in the historical perspective of the very long run. It is by no means indicative of a static agricultural society. This was an era of technological and industrial innovation: the automobile, electricity, the cinema, and many other novelties became important in these years, and many of them originated in France, at least in part. Between 1870 and 1914, not all fortunes of fifty- and sixty-year-olds were inherited. Far from it: we find a considerable number of wealthy people who made their money through entrepreneurial activities in industry and finance.

Nevertheless, the dominant dynamic, which explains most of the concentration of wealth, was an inevitable consequence of the inequality $r > g$. Regardless of whether the wealth a person holds at age fifty or sixty is inherited or earned, the fact remains that beyond a certain threshold, capital tends to reproduce itself and accumulates exponentially. The logic of $r > g$ implies that the entrepreneur always tends to turn into a rentier. Even if this happens later in life, the phenomenon becomes important as life expectancy increases. The

fact that a person has good ideas at age thirty or forty does not imply that she will still be having them at seventy or eighty, yet her wealth will continue to increase by itself. Or it can be passed on to the next generation and continue to increase there. Nineteenth-century French economic elites were creative and dynamic entrepreneurs, but the crucial fact remains that their efforts ultimately—and largely unwittingly—reinforced and perpetuated a society of rentiers owing to the logic of $r > g$.

The Rejuvenation of Wealth Owing to War

This self-sustaining mechanism collapsed owing to the repeated shocks suffered by capital and its owners in the period 1914–1945. A significant rejuvenation of wealth was one consequence of the two world wars. One sees this clearly in Figure 11.5: for the first time in history—and to this day the only time—average wealth at death in 1940–1950 fell below the average wealth of the living. This fact emerges even more clearly in the detailed profiles by age cohort in Table 11.1. In 1912, on the eve of World War I, octogenarians were more than two and a half times as wealthy as people in their fifties. In 1931, they were only 50 percent wealthier. And in 1947, the fifty-somethings were 40 percent wealthier than the eighty-somethings. To add insult to injury, the octogenarians even fell slightly behind people in their forties in that year. This was a period in which all old certainties were called into question. In the years after World War II, the plot of wealth versus age suddenly took the form of a bell curve with a peak in the fifty to fifty-nine age bracket—a form close to the “Modigliani triangle,” except for the fact that wealth did not fall to zero at the most advanced ages. This stands in sharp contrast to the nineteenth century, during which the wealth-age curve was monotonically increasing with age.

There is a simple explanation for this spectacular rejuvenation of wealth. As noted in Part Two, all fortunes suffered multiple shocks in the period 1914–1945—destruction of property, inflation, bankruptcy, expropriation, and so on—so that the capital/income ratio fell sharply. To a first approximation, one might assume that all fortunes suffered to the same degree, leaving the age profile unchanged. In fact, however, the younger generations, which in any case did not have much to lose, recovered more quickly from these wartime shocks than their elders did. A person who was sixty years old in 1940 and lost

everything he owned in a bombardment, expropriation, or bankruptcy had little hope of recovering. He would likely have died between 1950 and 1960 at the age of seventy or eighty with nothing to pass on to his heirs. Conversely, a person who was thirty in 1940 and lost everything (which was probably not much) still had plenty of time to accumulate wealth after the war and by the 1950s would have been in his forties and wealthier than that septuagenarian. The war reset all counters to zero, or close to zero, and inevitably resulted in a rejuvenation of wealth. In this respect, it was indeed the two world wars that wiped the slate clean in the twentieth century and created the illusion that capitalism had been overcome.

This is the central explanation for the exceptionally low inheritance flows observed in the decades after World War II: individuals who should have inherited fortunes in 1950–1960 did not inherit much because their parents had not had time to recover from the shocks of the previous decades and died without much wealth to their names.

In particular, this argument enables us to understand why the collapse of inheritance flows was greater than the collapse of wealth itself—nearly twice as large, in fact. As I showed in Part Two, total private wealth fell by more than two-thirds between 1910–1920 and 1950–1960: the private capital stock decreased from seven years of national income to just two to two and a half years (see Figure 3.6). The annual flow of inheritance fell by almost five-sixths, from 25 percent of national income on the eve of World War I to just 4–5 percent in the 1950s (see Figure 11.1).

The crucial fact, however, is that this situation did not last long. “Reconstruction capitalism” was by its nature a transitional phase and not the structural transformation some people imagined. In 1950–1960, as capital was once again accumulated and the capital/income ratio β rose, fortunes began to age once more, so that the ratio μ between average wealth at death and average wealth of the living also increased. Growing wealth went hand in hand with aging wealth, thereby laying the groundwork for an even stronger comeback of inherited wealth. By 1960, the profile observed in 1947 was already a memory: sexagenarians and septuagenarians were slightly wealthier than people in their fifties (see Table 11.1). The octogenarians’ turn came in the 1980s. In 1990–2000 the graph of wealth against age was increasing even more steeply. By 2010, the average wealth of people in their eighties was more than 30 percent higher than that of people in their fifties. If one were to include

(which Table 11.1 does not) gifts made prior to death in the wealth of different age cohorts, the graph for 2000–2010 would be steeper still, approximately the same as in 1900–1910, with average wealth for people in their seventies and eighties on the order of twice as great as people in their fifties, except that most deaths now occur at a more advanced age, which yields a considerably higher μ (see Figure 11.5).

How Will Inheritance Flows Evolve in the Twenty-First Century?

In view of the rapid increase of inheritance flows in recent decades, it is natural to ask if this increase is likely to continue. Figure 11.6 shows two possible evolutions for the twenty-first century. The central scenario is based on the assumption of an annual growth rate of 1.7 percent for the period 2010–2100 and a net return on capital of 3 percent.¹⁶ The alternative scenario is based on the assumption that growth will be reduced to 1 percent for the period 2010–2100, while the return on capital will rise to 5 percent. This could happen, for instance, if all taxes on capital and capital income, including the corporate income tax, were eliminated, or if such taxes were reduced while capital's share of income increased.

In the central scenario, simulations based on the theoretical model (which successfully accounts for the evolutions of 1820–2010) suggest that the annual inheritance flow would continue to grow until 2030–2040 and then stabilize at around 16–17 percent of national income. According to the alternative scenario, the inheritance flow should increase even more until 2060–2070 and then stabilize at around 2.4–2.5 percent of national income, a level similar to that observed in 1870–1910. In the first case, inherited wealth would make only a partial comeback; in the second, its comeback would be complete (as far as the total amount of inheritances and gifts is concerned). In both cases, the flow of inheritances and gifts in the twenty-first century is expected to be quite high, and in particular much higher than it was during the exceptionally low phase observed in the mid-twentieth century.

Such predictions are obviously highly uncertain and are of interest primarily for their illustrative value. The evolution of inheritance flows in the twenty-first century depends on many economic, demographic, and political

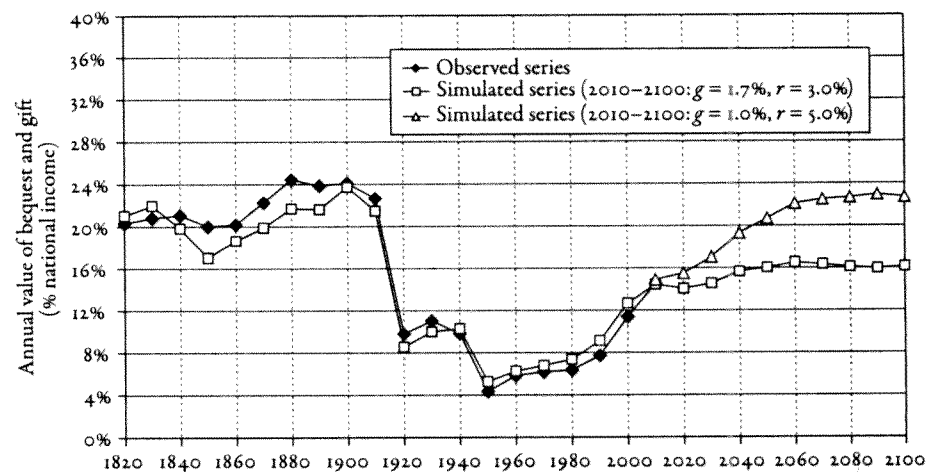


FIGURE 11.6. Observed and simulated inheritance flow: France, 1820–2100

Simulations based upon the theoretical model indicate that the level of the inheritance flow in the twenty-first century will depend upon the growth rate and the net rate of return to capital.

Sources and series: see piketty.pse.ens.fr/capital21c.

factors, and history shows that these are subject to large and highly unpredictable changes. It is easy to imagine other scenarios that would lead to different outcomes: for instance, a spectacular acceleration of demographic or economic growth (which seems rather implausible) or a radical change in public policy in regard to private capital or inheritance (which may be more realistic).¹⁷

It is also important to note that the evolution of the wealth-age profile depends primarily on savings behavior, that is, on the reasons why different groups of people accumulate wealth. As already discussed at some length, there are many such reasons, and their relative importance varies widely from individual to individual. One may save in anticipation of retirement or job loss (life-cycle or precautionary saving). Or one may save to amass or perpetuate a family fortune. Or, indeed, one may simply have a taste for wealth and the prestige that sometimes goes with it (dynastic saving or pure accumulation). In the abstract, it is perfectly possible to imagine a world in which all people would choose to convert all of their wealth into annuities and die with nothing. If such behavior were suddenly to become predominant in the twenty-first

century, inheritance flows would obviously shrink to virtually zero, regardless of the growth rate or return on capital.

Nevertheless, the two scenarios presented in Figure 11.6 are the most plausible in light of currently available information. In particular, I have assumed that savings behavior in 2010–2100 will remain similar to what it has been in the past, which can be characterized as follows. Despite wide variations in individual behavior, we find that savings rates increase with income and initial endowment, but variations by age group are much smaller: to a first approximation, people save on average at a similar rate regardless of age.¹⁸ In particular, the massive dissaving by the elderly predicted by the life-cycle theory of saving does not seem to occur, no matter how much life expectancy increases. The reason for this is no doubt the importance of the family transmission motive (no one really wants to die with nothing, even in aging societies), together with a logic of pure accumulation as well as the sense of security—and not merely prestige or power—that wealth brings.¹⁹ The very high concentration of wealth (with the upper decile always owning at least 50–60 percent of all wealth, even within each age cohort) is the missing link that explains all these facts, which Modigliani's theory totally overlooks. The gradual return to a dynastic type of wealth inequality since 1950–1960 explains the absence of dissaving by the elderly (most wealth belongs to individuals who have the means to finance their lifestyles without selling assets) and therefore the persistence of high inheritance flows and the perpetuation of the new equilibrium, in which mobility, though positive, is limited.

The essential point is that for a given structure of savings behavior, the cumulative process becomes more rapid and inequalitarian as the return on capital rises and the growth rate falls. The very high growth of the three postwar decades explains the relatively slow increase of μ (the ratio of average wealth at death to average wealth of the living) and therefore of inheritance flows in the period 1950–1970. Conversely, slower growth explains the accelerated aging of wealth and the rebound of inherited wealth that have occurred since the 1980s. Intuitively, when growth is high, for example, when wages increase 5 percent a year, it is easier for younger generations to accumulate wealth and level the playing field with their elders. When the growth of wages drops to 1–2 percent a year, the elderly will inevitably acquire most of the available assets, and their wealth will increase at a rate determined by the return on capital.²⁰ This simple but important process explains very well

the evolution of the ratio μ and the annual inheritance flow. It also explains why the observed and simulated series are so close for the entire period 1820–2010.²¹

Uncertainties notwithstanding, it is therefore natural to think that these simulations provide a useful guide for the future. Theoretically, one can show that for a large class of savings behaviors, when growth is low compared to the return on capital, the increase in μ nearly exactly balances the decrease in the mortality rate m , so that the product $\mu \times m$ is virtually independent of life expectancy and is almost entirely determined by the duration of a generation. The central result is that a growth of about 1 percent is in this respect not very different from zero growth: in both cases, the intuition that an aging population will spend down its savings and thus put an end to inherited wealth turns out to be false. In an aging society, heirs come into their inheritances later in life but inherit larger amounts (at least for those who inherit anything), so the overall importance of inherited wealth remains unchanged.²²

From the Annual Inheritance Flow to the Stock of Inherited Wealth

How does one go from the annual inheritance flow to the stock of inherited wealth? The detailed data assembled on inheritance flows and ages of the deceased, their heirs, and gift givers and recipients enable us to estimate for each year in the period 1820–2010 the share of inherited wealth in the total wealth of individuals alive in that year (the method is essentially to add up bequests and gifts received over the previous thirty years, sometimes more in the case of particularly early inheritances or exceptionally long lives or less in the opposite case) and thus to determine the share of inherited wealth in total private wealth. The principal results are indicated in Figure 11.7, where I also show the results of simulations for the period 2010–2100 based on the two scenarios discussed above.

The orders of magnitude to bear in mind are the following. In the nineteenth and early twentieth centuries, when the annual inheritance flow was 20–25 percent of national income, inherited wealth accounted for nearly all private wealth: somewhere between 80 and 90 percent, with an upward trend. Note, however, that in all societies, at all levels of wealth, a significant number of wealthy individuals, between 10 and 20 percent, accumulate fortunes during

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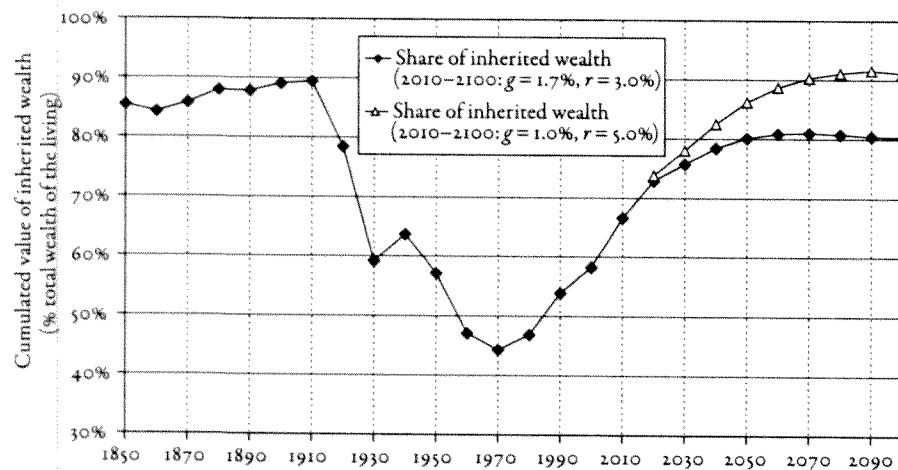


FIGURE 11.7. The share of inherited wealth in total wealth: France, 1850–2100

Inherited wealth represents 80–90 percent of total wealth in France in the nineteenth century; this share fell to 40–50 percent during the twentieth century, and might return to 80–90 percent during the twenty-first century.

Sources and series: see piketty.pse.ens.fr/capital21c.

their lifetimes, having started with nothing. Nevertheless, inherited wealth accounts for the vast majority of cases. This should come as no surprise: if one adds up an annual inheritance flow of 20 percent of national income for approximately thirty years, one accumulates a very large sum of legacies and gifts, on the order of six years of national income, which thus accounts for nearly all of private wealth.²³

Over the course of the twentieth century, following the collapse of inheritance flows, this equilibrium changed dramatically. The low point was attained in the 1970s: after several decades of small inheritances and accumulation of new wealth, inherited capital accounted for just over 40 percent of total private capital. For the first time in history (except in new countries), wealth accumulated in the lifetime of the living constituted the majority of all wealth: nearly 60 percent. It is important to realize two things: first, the nature of capital effectively changed in the postwar period, and second, we are just emerging from this exceptional period. Nevertheless, we are now clearly out of it: the share of inherited wealth in total wealth has grown steadily since the 1970s. Inherited wealth once again ac-

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counted for the majority of wealth in the 1980s, and according to the latest available figures it represents roughly two-thirds of private capital in France in 2010, compared with barely one-third of capital accumulated from savings. In view of today's very high inheritance flows, it is quite likely, if current trends continue, that the share of inherited wealth will continue to grow in the decades to come, surpassing 70 percent by 2020 and approaching 80 percent in the 2030s. If the scenario of 1 percent growth and 5 percent return on capital is correct, the share of inherited wealth could continue to rise, reaching 90 percent by the 2050s, or approximately the same level as in the Belle Époque.

Thus we see that the U-shaped curve of annual inheritance flows as a proportion of national income in the twentieth century went hand in hand with an equally impressive U-shaped curve of accumulated stock of inherited wealth as a proportion of national wealth. In order to understand the relation between these two curves, it is useful to compare the level of inheritance flows to the savings rate, which as noted in Part Two is generally around 10 percent of national income. When the inheritance flow is 20–25 percent of national income, as it was in the nineteenth century, then the amounts received each year as bequests and gifts are more than twice as large as the flow of new savings. If we add that a part of the new savings comes from the income of inherited capital (indeed, this was the major part of saving in the nineteenth century), it is clearly inevitable that inherited wealth will largely predominate over saved wealth. Conversely, when the inheritance flow falls to just 5 percent of national income, or half of new savings (again assuming a savings rate of 10 percent), as in the 1950s, it is not surprising that saved capital will dominate inherited capital. The central fact is that the annual inheritance flow surpassed the savings rate again in the 1980s and rose well above it in 2000–2010. Today it is nearly 15 percent of national income (counting both inheritances and gifts).

To get a better idea of the sums involved, it may be useful to recall that household disposable (monetary) income is 70–75 percent of national income in a country like France today (after correcting for transfers in kind, such as health, education, security, public services, etc. not included in disposable income). If we express the inheritance flow not as a proportion of national income, as I have done thus far, but as a proportion of disposable income, we find that the inheritances and gifts received each year by French households

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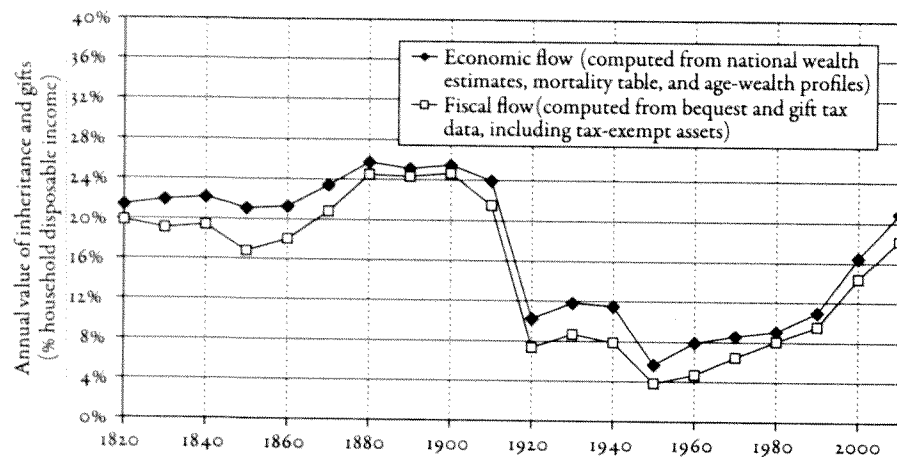


FIGURE 11.8. The annual inheritance flow as a fraction of household disposable income: France, 1820–2010

Expressed as a fraction of household disposable income (rather than national income), the annual inheritance flow is about 20 percent in 2010, in other words, close to its nineteenth-century level.

Sources and series: see piketty.pse.ens.fr/capital21c.

amounted to about 20 percent of their disposable income in the early 2010s, so that in this sense inheritance is already as important today as it was in 1820–1910 (see Figure 11.8). As noted in Chapter 5, it is probably better to use national income (rather than disposable income) as the reference denominator for purposes of spatial and temporal comparison. Nevertheless, the comparison with disposable income reflects today's reality in a more concrete way and shows that inherited wealth already accounts for one-fifth of household monetary resources (available for saving, for example) and will soon account for a quarter or more.

Back to Vautrin's Lecture

In order to have a more concrete idea of what inheritance represents in different people's lives, and in particular to respond more precisely to the existential question raised by Vautrin's lecture (what sort of life can one hope to live on earned income alone, compared to the life one can lead with inherited

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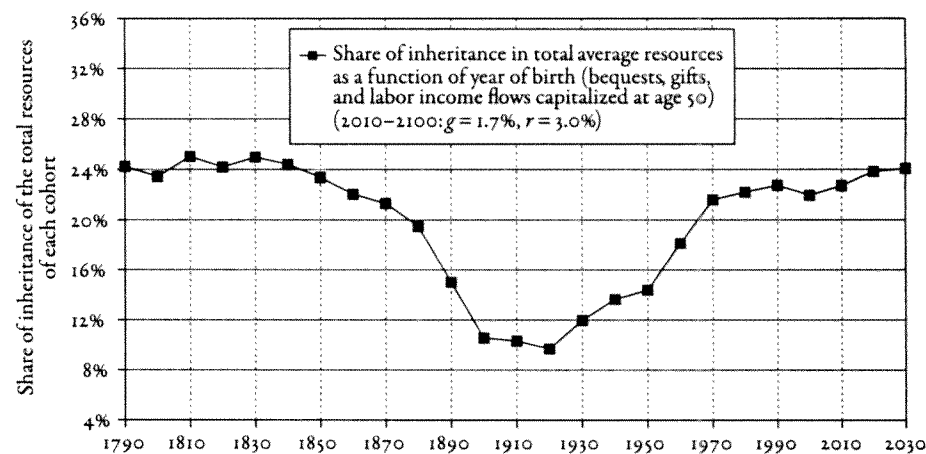


FIGURE 11.9. The share of inheritance in the total resources (inheritance and work) of cohorts born in 1790–2030

Inheritance made about 25 percent of the resources of nineteenth-century cohorts, down to less than 10 percent for cohorts born in 1910–1920 (who should have inherited in 1950–1960).

Sources and series: see piketty.pse.ens.fr/capital21c.

wealth?), the best way to proceed is to consider things from the point of view of successive generations in France since the beginning of the nineteenth century and compare the various resources to which they would have had access in their lifetime. This is the only way to account correctly for the fact that an inheritance is not a resource one receives every year.²⁴

Consider first the evolution of the share of inheritance in the total resources available to generations born in France in the period 1790–2030 (see Figure 11.9). I proceeded as follows. Starting with series of annual inheritance flows and detailed data concerning ages of the deceased, heirs, gift givers, and gift recipients, I calculated the share of inherited wealth in total available resources as a function of year of birth. Available resources include both inherited wealth (bequests and gifts) and income from labor, less taxes,²⁵ capitalized over the individual's lifetime using the average net return on capital in each year. Although this is the most reasonable way to approach the question initially, note that it probably leads to a slight underestimate of the share of inheritance, because heirs (and people with large fortunes more generally) are

usually able to obtain a higher return on capital than the interest rate paid on savings from earned income.²⁶

The results obtained are the following. If we look at all people born in France in the 1790s, we find that inheritance accounted for about 24 percent of the total resources available to them during their lifetimes, so that income from labor accounted for about 76 percent. For individuals born in the 1810s, the share of inheritance was 25 percent, leaving 75 percent for earned income. The same is approximately true for all the cohorts of the nineteenth century and up to World War I. Note that the 25 percent share for inheritance is slightly higher than the inheritance flow expressed as a percentage of national income (20–25 percent in the nineteenth century): this is because income from capital, generally about a third of national income, is de facto reassigned in part to inheritance and in part to earned income.²⁷

For cohorts born in the 1870s and after, the share of inheritance in total resources begins to decline gradually. This is because a growing share of these individuals should have inherited after World War I and therefore received less than expected owing to the shocks to their parents' assets. The lowest point was reached by cohorts born in 1910–1920: these individuals should have inherited in the years between the end of World War II and 1960, that is, at a time when the inheritance flow had reached its lowest level, so that inheritance accounted for only 8–10 percent of total resources. The rebound began with cohorts born in 1930–1950, who inherited in 1970–1990, and for whom inheritance accounted for 12–14 percent of total resources. But it is above all for cohorts born in 1970–1980, who began to receive gifts and bequests in 2000–2010, that inheritance regained an importance not seen since the nineteenth century: around 22–24 percent of total resources. These figures show clearly that we have only just emerged from the “end of inheritance” era, and they also show how differently different cohorts born in the twentieth century experienced the relative importance of savings and inheritance: the baby boom cohorts had to make it on their own, almost as much as the interwar and turn-of-the-century cohorts, who were devastated by war. By contrast, the cohorts born in the last third of the century experienced the powerful influence of inherited wealth to almost the same degree as the cohorts of the nineteenth and twenty-first centuries.

Rastignac's Dilemma

Thus far I have examined only averages. One of the principal characteristics of inherited wealth, however, is that it is distributed in a highly inegalitarian fashion. By introducing into the previous estimates inequality of inheritance on the one hand and inequality of earned income on the other, we will at last be able to analyze the degree to which Vautrin's somber lesson was true in different periods. Figure 11.10 shows that the cohorts born in the late eighteenth century and throughout the nineteenth century, including Eugène de Rastignac's cohort (Balzac tells us that he was born in 1798), did indeed face the terrible dilemma described by the ex-convict: those who could somehow lay hands on inherited wealth were able to live far better than those obliged to make their way by study and work.

In order to make it possible to interpret the different levels of resources as concretely and intuitively as possible, I have expressed resources in terms of multiples of the average income of the least well paid 50 percent of workers in each period. We may take this baseline as the standard of living of the “lower class,” which generally claimed about half of national income in this period. This is a useful reference point for judging inequality in a society.²⁸

The principal results obtained are the following. In the nineteenth century, the lifetime resources available to the wealthiest 1 percent of heirs (that is, the individuals inheriting the top 1 percent of legacies in their generation) were 25–30 times greater than the resources of the lower class. In other words, a person who could obtain such an inheritance, either from parents or via a spouse, could afford to pay a staff of 25–30 domestic servants throughout his life. At the same time, the resources afforded by the top 1 percent of earned incomes (in jobs such as judge, prosecutor, or attorney, as in Vautrin's lecture) were about ten times the resources of the lower class. This was not negligible, but it was clearly a much lower standard of living, especially since, as Vautrin observed, such jobs were not easy to obtain. It was not enough to do brilliantly in law school. Often one had to plot and scheme for many long years with no guarantee of success. Under such conditions, if the opportunity to lay hands on an inheritance in the top centile presented itself, it was surely better not to pass it up. At the very least, it was worth a moment's reflection.

If we now do the same calculation for the generations born in 1910–1920, we find that they faced different life choices. The top 1 percent of inheritances

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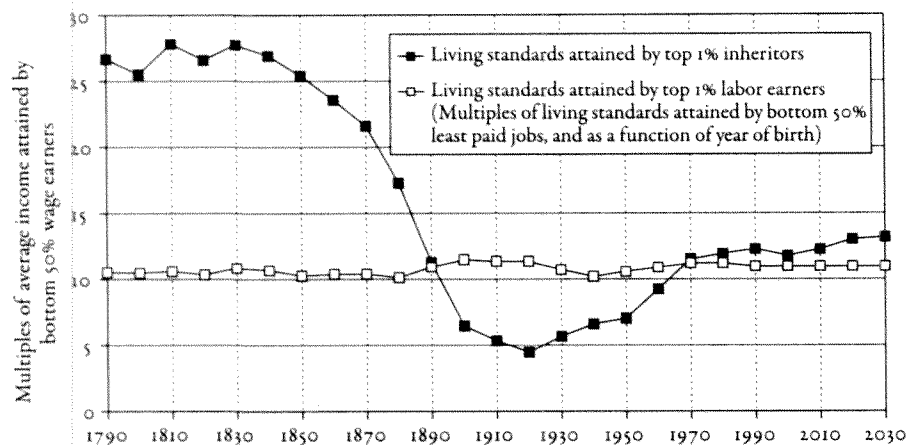


FIGURE 11.10. The dilemma of Rastignac for cohorts born in 1790–2030

In the nineteenth century, the living standards that could be attained by the top 1 percent inheritors were a lot higher than those that could be attained by the top 1 percent labor earners.

Sources and series: see piketty.pse.ens.fr/capital21c.

afforded resources that were barely 5 times the lower class standard. The best paid 1 percent of jobs still afforded 10–12 times that standard (as a consequence of the fact that the top centile of the wage hierarchy was relatively stable at about 6–7 percent of total wages over a long period).²⁹ For the first time in history, no doubt, one could live better by obtaining a job in the top centile rather than an inheritance in the top centile: study, work, and talent paid better than inheritance.

The choice was almost as clear for the baby boom cohorts: a Rastignac born in 1940–1950 had every reason to aim for a job in the top centile (which afforded resources 10–12 times greater than the lower class standard) and to ignore the Vautrins of the day (since the top centile of inheritances brought in just 6–7 times the lower class standard). For all these generations, success through work was more profitable and not just more moral.

Concretely, these results also indicate that throughout this period, and for all the cohorts born between 1910 and 1960, the top centile of the income hierarchy consisted largely of people whose primary source of income was work. This was a major change, not only because it was a historical first

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(in France and most likely in all other European countries) but also because the top centile is an extremely important group in every society.³⁰ As noted in Chapter 7, the top centile is a relatively broad elite that plays a central role in shaping the economic, political, and symbolic structure of society.³¹ In all traditional societies (remember that the aristocracy represented 1–2 percent of the population in 1789), and in fact down to the Belle Époque (despite the hopes kindled by the French Revolution), this group was always dominated by inherited capital. The fact that this was not the case for the cohorts born in the first half of the twentieth century was therefore a major event, which fostered unprecedented faith in the irreversibility of social progress and the end of the old social order. To be sure, inequality was not eradicated in the three decades after World War II, but it was viewed primarily from the optimistic angle of wage inequalities. To be sure, there were significant differences between blue-collar workers, white-collar workers, and managers, and these disparities tended to grow wider in France in the 1950s. But there was a fundamental unity to this society, in which everyone participated in the communion of labor and honored the meritocratic ideal. People believed that the arbitrary inequalities of inherited wealth were a thing of the past.

For the cohorts born in the 1970s, and even more for those born later, things are quite different. In particular, life choices have become more complex: the inherited wealth of the top centile counts for about as much as the employment of the top centile (or even slightly more: 12–13 times the lower class standard of living for inheritance versus 10–11 times for earned income). Note, however, that the structure of inequality and of the top centile today is also quite different from what it was in the nineteenth century, because inherited wealth is significantly less concentrated today than in the past.³² Today's cohorts face a unique set of inequalities and social structures, which are in a sense somewhere between the world cynically described by Vautrin (in which inheritance predominated over labor) and the enchanted world of the postwar decades (in which labor predominated over inheritance). According to our findings, the top centile of the social hierarchy in France today are likely to derive their income about equally from inherited wealth and their own labor.

The Basic Arithmetic of Rentiers and Managers

To recapitulate: a society in which income from inherited capital predominates over income from labor at the summit of the social hierarchy—that is, a society like those described by Balzac and Austen—two conditions must be satisfied. First, the capital stock and, within it, the share of inherited capital, must be large. Typically, the capital/income ratio must be on the order of 6 or 7, and most of the capital stock must consist of inherited capital. In such a society, inherited wealth can account for about a quarter of the average resources available to each cohort (or even as much as a third if one assumes a high degree of inequality in returns on capital). This was the case in the eighteenth and nineteenth centuries, until 1914. This first condition, which concerns the stock of inherited wealth, is once again close to being satisfied today.

The second condition is that inherited wealth must be extremely concentrated. If inherited wealth were distributed in the same way as income from labor (with identical levels for the top decile, top centile, etc., of the hierarchies of both inheritance and labor income), then Vautrin's world could never exist: income from labor would always far outweigh income from inherited wealth (by a factor of at least three),³³ and the top 1 percent of earned incomes would systematically and mechanically outweigh the top 1 percent of incomes from inherited capital.³⁴

In order for the concentration effect to dominate the volume effect, the top centile of the inheritance hierarchy must by itself claim the lion's share of inherited wealth. This was indeed the case in the eighteenth and nineteenth centuries, when the top centile owned 50–60 percent of total wealth (or as much as 70 percent in Britain or Belle Époque Paris), which is nearly 10 times greater than the top centile's share of earned income (about 6–7 percent, a figure that remained stable over a very long period of time). This 10:1 ratio between wealth and salary concentrations is enough to counterbalance the 3:1 volume ratio and explains why an inherited fortune in the top centile enabled a person to live practically 3 times better than an employment in the top centile in the patrimonial society of the nineteenth century (see Figure 11.10).

This basic arithmetic of rentiers and managers also helps us to understand why the top centiles of inherited wealth and earned income are almost balanced in France today: the concentration of wealth is about three times

greater than the concentration of earned income (the top centile owns 20 percent of total wealth, while the top centile of earners claims 6–7 percent of total wages), so the concentration effect roughly balances the volume effect. We can also see why heirs were so clearly dominated by managers during the Trente Glorieuses (the 3:1 concentration effect was too small to balance the 10:1 mass effect). Apart from these situations, which are the result of extreme shocks and specific public policies (especially tax policies), however, the “natural” structure of inequality seems rather to favor a domination of rentiers over managers. In particular, when growth is low and the return on capital is distinctly greater than the growth rate, it is almost inevitable (at least in the most plausible dynamic models) that wealth will become so concentrated that top incomes from capital will predominate over top incomes from labor by a wide margin.³⁵

The Classic Patrimonial Society: The World of Balzac and Austen

Nineteenth-century novelists obviously did not use the same categories we do to describe the social structures of their time, but they depicted the same deep structures: those of a society in which a truly comfortable life required the possession of a large fortune. It is striking to see how similar the inegalitarian structures, orders of magnitude, and amounts minutely specified by Balzac and Austen were on both sides of the English Channel, despite the differences in currency, literary style, and plot. As noted in Chapter 2, monetary markers were extremely stable in the inflation-free world described by both novelists, so that they were able to specify precisely how large an income (or fortune) one needed to rise above mediocrity and live with a minimum of elegance. For both writers, the material and psychological threshold was about 30 times the average income of the day. Below that level, a Balzacian or Austenian hero found it difficult to live a dignified life. It was quite possible to cross that threshold if one was among the wealthiest 1 percent (and even better if one approached the top 0.5 or even 0.1 percent) of French or British society in the nineteenth century. This was a well-defined and fairly numerous social group—a minority, to be sure, but a large enough minority to define the structure of society and sustain a novelistic universe.³⁶ But it was totally out of reach for anyone content to practice a profession, no matter how well it paid: the best paid 1 percent of professions did not allow

one to come anywhere near this standard of living (nor did the best paid 0.1 percent).³⁷

In most of these novels, the financial, social, and psychological setting is established in the first few pages and occasionally alluded to thereafter, so that the reader will not forget everything that sets the characters of the novel apart from the rest of society: the monetary markers that shape their lives, their rivalries, their strategies, and their hopes. In *Père Goriot*, the old man's fall from grace is conveyed at once by the fact that he has been obliged to make do with the filthiest room in the Vauquer boardinghouse and survive on the skimpiest of meals in order to reduce his annual expenditure to 500 francs (or roughly the average annual income at the time—abject poverty for Balzac).³⁸ The old man sacrificed everything for his daughters, each of whom received a dowry of 500,000 francs, or an annual rent of 25,000 francs, about 50 times the average income: in Balzac's novels, this is the basic unit of fortune, the symbol of true wealth and elegant living. The contrast between the two extremes of society is thus established at the outset. Nevertheless, Balzac does not forget that between abject poverty and true wealth all sorts of intermediate situations exist—some more mediocre than others. The small Rastignac estate near Angoulême yields barely 3,000 francs a year (or 6 times the average income). For Balzac, this is typical of the moneyless lesser nobility of the provinces. Eugène's family can spare only 1,200 francs a year to pay for his law studies in the capital. In Vautrin's lecture, the annual salary of 5,000 francs (or 10 times average income) that young Rastignac could potentially earn as a royal prosecutor after much effort and with great uncertainty is the very symbol of mediocrity—proof, if proof were needed, that study leads nowhere. Balzac depicts a society in which the minimum objective is to obtain 20–30 times the average income of the day, or even 50 times (as Delphine and Anastasie are able to do thanks to their dowries), or better yet, 100 times, thanks to the 50,000 francs in annual rent that Mademoiselle Victorine's million will earn.

In *César Birotteau*, the audacious perfumer also covets a fortune of a million francs so that he can keep half for himself and his wife while using the other half as a dowry for his daughter, which is what he believes it will take for her to marry well and allow his future son-in-law to purchase the practice of the notary Roguin. His wife, who would prefer to return to the land, tries to convince him that they can retire on an annual rent of 2,000 francs and

marry their daughter with only 8,000 francs of rent, but César will not hear of it: he does not want to wind up like his associate, Pillerault, who retired with just 5,000 francs of rent. To live well, he needs 20–30 times the average income. With only 5–10 times the average, one barely survives.

We find precisely the same orders of magnitude on the other side of the Channel. In *Sense and Sensibility*, the kernel of the plot (financial as well as psychological) is established in the first ten pages in the appalling dialogue between John Dashwood and his wife, Fanny. John has just inherited the vast Norland estate, which brings in 4,000 pounds a year, or more than 100 times the average income of the day (which was barely more than 30 pounds a year in 1800–1810).³⁹ Norland is the quintessential example of a very large landed estate, the pinnacle of wealth in Jane Austen's novels. With 2,000 pounds a year (or more than 60 times the average income), Colonel Brandon and his Delaford estate are well within expectations for a great landowner. In other novels we discover that 1,000 pounds a year is quite sufficient for an Austenian hero. By contrast, 600 pounds a year (20 times average income) is just enough to leave John Willoughby at the lower limit of a comfortable existence, and people wonder how the handsome and impetuous young man can live so large on so little. This is no doubt the reason why he soon abandons Marianne, distraught and inconsolable, for Miss Grey and her dowry of 50,000 pounds (2,500 pounds in annual rent, or 80 times average income), which is almost exactly the same size as Mademoiselle Victorine's dowry of a million francs under prevailing exchange rates. As in Balzac, a dowry half that size, such as Delphine's or Anastasie's, is perfectly satisfactory. For example, Miss Morton, the only daughter of Lord Norton, has a capital of 30,000 pounds (1,500 pounds of rent, or 50 times average income), which makes her the ideal heiress and the quarry of every prospective mother-in-law, starting with Mrs. Ferrars, who has no difficulty imagining the girl married to her son Edward.⁴⁰

From the opening pages, John Dashwood's opulence is contrasted with the comparative poverty of his half-sisters, Elinor, Marianne, and Margaret, who, along with their mother, must get by on 500 pounds a year (or 125 pounds apiece, barely four times the average per capita income), which is woefully inadequate for the girls to find suitable husbands. Mrs. Jennings, who revels in the social gossip of the Devonshire countryside, likes to remind them of this during the many balls, courtesies calls, and musical evenings that fill their days and frequently bring them into contact with young and attractive

suitors, who unfortunately do not always tarry: "The smallness of your fortune may make him hang back." As in Balzac's novels, so too in Jane Austen's: only a very modest life is possible with just 5 or 10 times the average income. Incomes close to or below the average of 30 pounds a year are not even mentioned, moreover: this, one suspects, is not much above the level of the servants, so there is no point in talking about it. When Edward Ferrars thinks of becoming a pastor and accepting the parish of Deliford with its living of 200 pounds a year (between 6 and 7 times the average), he is nearly taken for a saint. Even though he supplements his living with the income from the small sum left him by his family as punishment for his *mésalliance*, and with the meager income that Elinor brings, the couple will not go very far, and "they were neither of them quite enough in love to think that three hundred and fifty pounds a year would supply them with the comforts of life."⁴¹ This happy and virtuous outcome should not be allowed to hide the essence of the matter: by accepting the advice of the odious Fanny and refusing to aid his half-sisters or to share one iota of his immense fortune, despite the promises he made to his father on his deathbed, John Dashwood forces Elinor and Marianne to live mediocre and humiliating lives. Their fate is entirely sealed by the appalling dialogue at the beginning of the book.

Toward the end of the nineteenth century, the same type of inegalitarian financial arrangement could also be found in the United States. In *Washington Square*, a novel published by Henry James in 1881 and magnificently translated to the screen in William Wyler's film *The Heiress* (1949), the plot revolves entirely around confusion as to the amount of a dowry. But arithmetic is merciless, and it is best not to make a mistake, as Catherine Sloper discovers when her fiancé flees on learning that her dowry will bring him only \$10,000 a year in rent rather than the \$30,000 he was counting on (or just 20 times the average US income of the time instead of 60). "You are too ugly," her tyrannical, extremely rich, widower father tells her, in a manner reminiscent of Prince Bolkonsky with Princess Marie in *War and Peace*. Men can also find themselves in very fragile positions: in *The Magnificent Ambersons*, Orson Welles shows us the downfall of an arrogant heir, George, who at one point has enjoyed an annual income of \$60,000 (120 times the average) before falling victim in the early 1900s to the automobile revolution and ending up with a job that pays a below-average \$350 a year.

*Extreme Inequality of Wealth: A Condition of Civilization
in a Poor Society?*

Interestingly, nineteenth-century novelists were not content simply to describe precisely the income and wealth hierarchies that existed in their time. They often give a very concrete and intimate account of how people lived and what different levels of income meant in terms of the realities of everyday life. Sometimes this went along with a certain justification of extreme inequality of wealth, in the sense that one can read between the lines an argument that without such inequality it would have been impossible for a very small elite to concern themselves with something other than subsistence: extreme inequality is almost a condition of civilization.

In particular, Jane Austen minutely describes daily life in the early nineteenth century: she tells us what it cost to eat, to buy furniture and clothing, and to travel about. And indeed, in the absence of modern technology, everything is very costly and takes time and above all staff. Servants are needed to gather and prepare food (which cannot easily be preserved). Clothing costs money: even the most minimal fancy dress might cost several months' or even years' income. Travel was also expensive. It required horses, carriages, servants to take care of them, feed for the animals, and so on. The reader is made to see that life would have been objectively quite difficult for a person with only 3–5 times the average income, because it would then have been necessary to spend most of one's time attending to the needs of daily life. If you wanted books or musical instruments or jewelry or ball gowns, then there was no choice but to have an income 20–30 times the average of the day.

In Part One I noted that it was difficult and simplistic to compare purchasing power over long periods of time because consumption patterns and prices change radically in so many dimensions that no single index can capture the reality. Nevertheless, according to official indices, the average per capita purchasing power in Britain and France in 1800 was about one-tenth what it was in 2010. In other words, with 20 or 30 times the average income in 1800, a person would probably have lived no better than with 2 or 3 times the average income today. With 5–10 times the average income in 1800, one would have been in a situation somewhere between the minimum and average wage today.

In any case, a Balzacian or Austenian character would have used the services of dozens of servants with no embarrassment. For the most part, we are

not even told their names. At times both novelists mocked the pretensions and extravagant needs of their characters, as, for example, when Marianne, who imagines herself in an elegant marriage with Willoughby, explains with a blush that according to her calculations it is difficult to live with less than 2,000 pounds a year (more than 60 times the average income of the time): "I am sure I am not extravagant in my demands. A proper establishment of servants, a carriage, perhaps two, and hunters, cannot be supported on less."⁴² Elinor cannot refrain from pointing out to her sister that she *is* being extravagant. Similarly, Vautrin himself observed that it took an income of 25,000 francs (more than 50 times the average) to live with a minimum of dignity. In particular, he insists, with an abundance of detail, on the cost of clothing, servants, and travel. No one tells him that he is exaggerating, but Vautrin is so cynical that readers are in no doubt.⁴³ One finds a similarly unembarrassed recital of needs, with a similar notion of how much it takes to live comfortably, in Arthur Young's account of his travels.⁴⁴

Notwithstanding the extravagance of some of their characters, these nineteenth-century novelists describe a world in which inequality was to a certain extent necessary: if there had not been a sufficiently wealthy minority, no one would have been able to worry about anything other than survival. This view of inequality deserves credit for not describing itself as meritocratic, if nothing else. In a sense, a minority was chosen to live on behalf of everyone else, but no one tried to pretend that this minority was more meritorious or virtuous than the rest. In this world, it was perfectly obvious, moreover, that without a fortune it was impossible to live a dignified life. Having a diploma or skill might allow a person to produce, and therefore to earn, 5 or 10 times more than the average, but not much more than that. Modern meritocratic society, especially in the United States, is much harder on the losers, because it seeks to justify domination on the grounds of justice, virtue, and merit, to say nothing of the insufficient productivity of those at the bottom.⁴⁵

Meritocratic Extremism in Wealthy Societies

It is interesting, moreover, to note that the most ardent meritocratic beliefs are often invoked to justify very large wage inequalities, which are said to be more justified than inequalities due to inheritance. From the time of Napoleon to World War I, France has had a small number of very well paid and

high-ranking civil servants (earning 50–100 times the average income of the day), starting with government ministers. This has always been justified—including by Napoleon himself, a scion of the minor Corsican nobility—by the idea that the most capable and talented individuals ought to be able to live on their salaries with as much dignity and elegance as the wealthiest heirs (a top-down response to Vautrin, as it were). As Adolphe Thiers remarked in the Chamber of Deputies in 1831: "prefects should be able to occupy a rank equal to the notable citizens in the *départements* they live in."⁴⁶ In 1881, Paul Leroy-Beaulieu explained that the state went too far by raising only the lowest salaries. He vigorously defended the high civil servants of his day, most of whom received little more than "15,000 to 20,000 francs a year"; these were "figures that might seem enormous to the common man" but actually "make it impossible to live with elegance or amass savings of any size."⁴⁷

The most worrisome aspect of this defense of meritocracy is that one finds the same type of argument in the wealthiest societies, where Jane Austen's points about need and dignity make little sense. In the United States in recent years, one frequently has heard this type of justification for the stratospheric pay of supermanagers (50–100 times average income, if not more). Proponents of such high pay argued that without it, only the heirs of large fortunes would be able to achieve true wealth, which would be unfair. In the end, therefore, the millions or tens of millions of dollars a year paid to supermanagers contribute to greater social justice.⁴⁸ This kind of argument could well lay the groundwork for greater and more violent inequality in the future. The world to come may well combine the worst of two past worlds: both very large inequality of inherited wealth and very high wage inequalities justified in terms of merit and productivity (claims with very little factual basis, as noted). Meritocratic extremism can thus lead to a race between supermanagers and rentiers, to the detriment of those who are neither.

It also bears emphasizing that the role of meritocratic beliefs in justifying inequality in modern societies is evident not only at the top of hierarchy but lower down as well, as an explanation for the disparity between the lower and middle classes. In the late 1980s, Michèle Lamont conducted several hundred in-depth interviews with representatives of the "upper middle class" in the United States and France, not only in large cities such as New York and Paris but also in smaller cities such as Indianapolis and Clermont-Ferrand. She asked about their careers, how they saw their social identity and place in

society, and what differentiated them from other social groups and categories. One of the main conclusions of her study was that in both countries, the “educated elite” placed primary emphasis on their personal merit and moral qualities, which they described using terms such as rigor, patience, work, effort, and so on (but also tolerance, kindness, etc.).⁴⁹ The heroes and heroines in the novels of Austen and Balzac would never have seen the need to compare their personal qualities to those of their servants (who go unmentioned in their texts).

The Society of Petits Rentiers

The time has come to return to today’s world, and more precisely to France in the 2010s. According to my estimates, inheritance will represent about one quarter of total lifetime resources (from both inheritance and labor) for cohorts born in the 1970s and after. In terms of total amounts involved, inheritance has thus nearly regained the importance it had for nineteenth-century cohorts (see Figure 11.9). I should add that these predictions are based on the central scenario: if the alternative scenario turns out to be closer to the truth (lower growth, higher net return on capital), inheritance could represent a third or even as much as four-tenths of the resources of twenty-first-century cohorts.⁵⁰

The fact that the total volume of inheritance has regained the same level as in the past does not mean that it plays the same social role, however. As noted, the very significant deconcentration of wealth (which has seen the top centile’s share decrease by nearly two-thirds in a century from 60 percent in 1910–1920 to just over 20 percent today) and the emergence of a patrimonial middle class imply that there are far fewer very large estates today than there were in the nineteenth century. Concretely, the dowries of 500,000 francs that Père Goriot and César Birotteau sought for their daughters—dowries that yielded an annual rent of 25,000 francs, or 50 times the average annual per capita income of 500 francs at that time—would be equivalent to an estate of 30 million euros today, with a yield in interest, dividends, and rents on the order of 1.5 million euros a year (or 50 times the average per capita income of 30,000 euros).⁵¹ Inheritances of this magnitude do exist, as do considerably larger ones, but there are far fewer of them than in the nineteenth century, even though the total volume of wealth and inheritance has practically regained its previous high level.

Furthermore, no contemporary novelist would fill her plots with estates valued at 30 million euros as Balzac, Austen, and James did. Explicit monetary references vanished from literature after inflation blurred the meaning of the traditional numbers. But more than that, rentiers themselves vanished from literature as well, and the whole social representation of inequality changed as a result. In contemporary fiction, inequalities between social groups appear almost exclusively in the form of disparities with respect to work, wages, and skills. A society structured by the hierarchy of wealth has been replaced by a society whose structure depends almost entirely on the hierarchy of labor and human capital. It is striking, for example, that many recent American TV series feature heroes and heroines laden with degrees and high-level skills, whether to cure serious maladies (*House*), solve mysterious crimes (*Bones*), or even to preside over the United States (*West Wing*). The writers apparently believe that it is best to have several doctorates or even a Nobel Prize. It is not unreasonable to interpret any number of such series as offering a hymn to a just inequality, based on merit, education, and the social utility of elites. Still, certain more recent creations depict a more worrisome inequality, based more clearly on vast wealth. *Damages* depicts unfeeling big businessmen who have stolen hundreds of millions of dollars from their workers and whose even more selfish spouses want to divorce their husbands without giving up the cash or the swimming pool. In season 3, inspired by the Madoff affair, the children of the crooked financier do everything they can to hold on to their father’s assets, which are stashed in Antigua, in order to maintain their high standard of living.⁵² In *Dirty Sexy Money* we see decadent young heirs and heiresses with little merit or virtue living shamelessly on family money. But these are the exceptions that prove the rule, and any character who lives on wealth accumulated in the past is normally depicted in a negative light, if not frankly denounced, whereas such a life is perfectly natural in Austen and Balzac and necessary if there are to be any true feelings among the characters.

This huge change in the social representation of inequality is in part justified, yet it rests on a number of misunderstandings. First, it is obvious that education plays a more important role today than in the eighteenth century. (In a world where nearly everyone possesses some kind of degree and certain skills, it is not a good idea to go without: it is in everyone’s interest to acquire some skill, even those who stand to inherit substantial wealth,

especially since inheritance often comes too late from the standpoint of the heirs.) However, it does not follow that society has become more meritocratic. In particular, it does not follow that the share of national income going to labor has actually increased (as noted, it has not, in any substantial amount), and it certainly does not follow that everyone has access to the same opportunities to acquire skills of every variety. Indeed, inequalities of training have to a large extent simply been translated upward, and there is no evidence that education has really increased intergenerational mobility.⁵³ Nevertheless, the transmission of human capital is always more complicated than the transmission of financial capital or real estate (the heir must make some effort), and this has given rise to a widespread—and partially justified—faith in the idea that the end of inherited wealth has made for a more just society.

The chief misunderstanding is, I think, the following. First, inheritance did not come to an end: the distribution of inherited capital has changed, which is something else entirely. In France today, there are certainly fewer very large estates—estates of 30 million or even 5 or 10 million euros are less common—than in the nineteenth century. But since the total volume of inherited wealth has almost regained its previous level, it follows that there are many more substantial and even fairly large inheritances: 200,000, 500,000, 1 million, or even 2 million euros. Such bequests, though much too small to allow the beneficiaries to give up all thought of a career and live on the interest, are nevertheless substantial amounts, especially when compared with what much of the population earns over the course of a working lifetime. In other words, we have moved from a society with a small number of very wealthy rentiers to one with a much larger number of less wealthy rentiers: a society of *petits rentiers* if you will.

The index that I think is most pertinent for representing this change is presented in Figure 11.11. It is the percentage of individuals in each cohort who inherit (as bequest or gift) amounts larger than the least well paid 50 percent of the population earn in a lifetime. This amount changes over time: at present, the average annual wage of the bottom half of the income distribution is around 15,000 euros, or a total of 750,000 euros over the course of a fifty-year career (including retirement). This is more or less what a life at minimum wage brings in. As the figure shows, in the nineteenth century about 10 percent of a cohort inherited amounts greater than this. This proportion fell to barely more

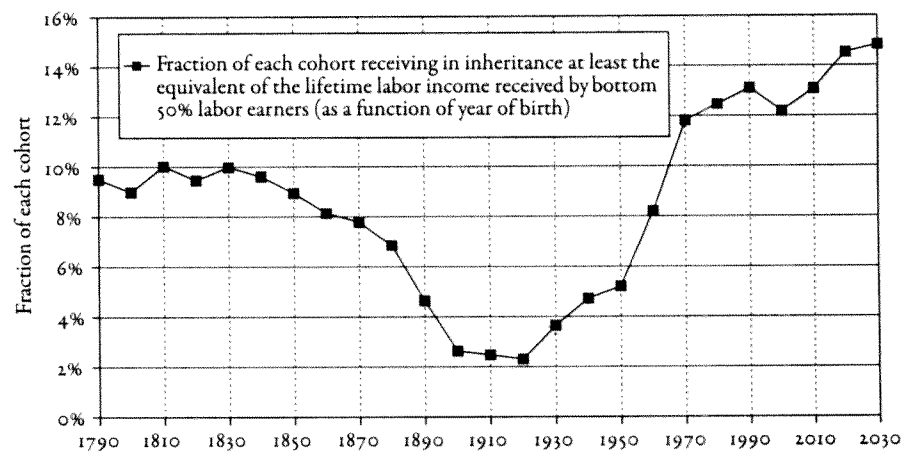


FIGURE 11.11. Which fraction of a cohort receives in inheritance the equivalent of a lifetime labor income?

Within the cohorts born around 1970–1980, 12–14 percent of individuals receive in inheritance the equivalent of the lifetime labor income received by the bottom 50 percent less well paid workers.

Sources and series: see piketty.pse.ens.fr/capital21c.

than 2 percent for cohorts born in 1910–1920 and 4–5 percent for cohorts born in 1930–1950. According to my estimates, the proportion has already risen to about 12 percent for cohorts born in 1970–1980 and may reach or exceed 15 percent for cohorts born in 2010–2020. In other words, nearly one-sixth of each cohort will receive an inheritance larger than the amount the bottom half of the population earns through labor in a lifetime. (And this group largely coincides with the half of the population that inherits next to nothing).⁵⁴ Of course, there is nothing to prevent the inheriting sixth from acquiring diplomas or working and no doubt earning more through work than the bottom half of the income distribution. This is nevertheless a fairly disturbing form of inequality, which is in the process of attaining historically unprecedented heights. It is also more difficult to represent artistically or to correct politically, because it is a commonplace inequality opposing broad segments of the population rather than pitting a small elite against the rest of society.

The Rentier, Enemy of Democracy

Second, there is no guarantee that the distribution of inherited capital will not ultimately become as inegalitarian in the twenty-first century as it was in the nineteenth. As noted in the previous chapter, there is no ineluctable force standing in the way of a return to extreme concentration of wealth, as extreme as in the Belle Époque, especially if growth slows and the return on capital increases, which could happen, for example, if tax competition between nations heats up. If this were to happen, I believe that it would lead to significant political upheaval. Our democratic societies rest on a meritocratic worldview, or at any rate a meritocratic hope, by which I mean a belief in a society in which inequality is based more on merit and effort than on kinship and rents. This belief and this hope play a very crucial role in modern society, for a simple reason: in a democracy, the professed equality of rights of all citizens contrasts sharply with the very real inequality of living conditions, and in order to overcome this contradiction it is vital to make sure that social inequalities derive from rational and universal principles rather than arbitrary contingencies. Inequalities must therefore be just and useful to all, at least in the realm of discourse and as far as possible in reality as well. ("Social distinctions can be based only on common utility," according to article 1 of the 1789 Declaration of the Rights of Man and the Citizen.) In 1893, Emile Durkheim predicted that modern democratic society would not put up for long with the existence of inherited wealth and would ultimately see to it that ownership of property ended at death.⁵⁵

It is also significant that the words "rent" and "rentier" took on highly pejorative connotations in the twentieth century. In this book, I use these words in their original descriptive sense, to denote the annual rents produced by a capital asset and the individuals who live on those rents. Today, the rents produced by an asset are nothing other than the income on capital, whether in the form of rent, interest, dividends, profits, royalties, or any other legal category of revenue, provided that such income is simply remuneration for ownership of the asset, independent of any labor. It was in this original sense that the words "rent" and "rentiers" were used in the eighteenth and nineteenth centuries, for example in the novels of Balzac and Austen, at a time when the domination of wealth and its income at the top of the income hierarchy was acknowledged and accepted, at least among the elite. It is striking to ob-

serve that this original meaning largely disappeared as democratic and meritocratic values took hold. During the twentieth century, the word "rent" became an insult and a rather abusive one. This linguistic change can be observed everywhere.

It is particularly interesting to note that the word "rent" is often used nowadays in a very different sense: to denote an imperfection in the market (as in "monopoly rent"), or, more generally, to refer to any undue or unjustified income. At times, one almost has the impression that "rent" has become synonymous with "economic ill." Rent is the enemy of modern rationality and must be eliminated root and branch by striving for ever purer and more perfect competition. A typical example of this use of the word can be seen in a recent interview that the president of the European Central Bank granted to several major European newspapers a few months after his nomination. When the journalists posed questions about his strategy for resolving Europe's problems, he offered this lapidary response: "We must fight against rents."⁵⁶ No further details were offered. What the central banker had in mind, apparently, was lack of competition in the service sector: taxi drivers, hairdressers, and the like were presumably making too much money.⁵⁷

The problem posed by this use of the word "rent" is very simple: the fact that capital yields income, which in accordance with the original meaning of the word we refer to in this book as "annual rent produced by capital," has absolutely nothing to do with the problem of imperfect competition or monopoly. If capital plays a useful role in the process of production, it is natural that it should be paid. When growth is slow, it is almost inevitable that this return on capital is significantly higher than the growth rate, which automatically bestows outsized importance on inequalities of wealth accumulated in the past. This logical contradiction cannot be resolved by a dose of additional competition. Rent is not an imperfection in the market: it is rather the consequence of a "pure and perfect" market for capital, as economists understand it: a capital market in which each owner of capital, including the least capable of heirs, can obtain the highest possible yield on the most diversified portfolio that can be assembled in the national or global economy. To be sure, there is something astonishing about the notion that capital yields rent, or income that the owner of capital obtains without working. There is something in this notion that is an affront to common sense and that has in fact perturbed any number of civilizations, which have responded in various ways,

not always benign, ranging from the prohibition of usury to Soviet-style communism. Nevertheless, rent is a reality in any market economy where capital is privately owned. The fact that landed capital became industrial and financial capital and real estate left this deeper reality unchanged. Some people think that the logic of economic development has been to undermine the distinction between labor and capital. In fact, it is just the opposite: the growing sophistication of capital markets and financial intermediation tends to separate owners from managers more and more and thus to sharpen the distinction between pure capital income and labor income. Economic and technological rationality at times has nothing to do with democratic rationality. The former stems from the Enlightenment, and people have all too commonly assumed that the latter would somehow naturally derive from it, as if by magic. But real democracy and social justice require specific institutions of their own, not just those of the market, and not just parliaments and other formal democratic institutions.

To recapitulate: the fundamental force for divergence, which I have emphasized throughout this book, can be summed up in the inequality $r > g$, which has nothing to do with market imperfections and will not disappear as markets become freer and more competitive. The idea that unrestricted competition will put an end to inheritance and move toward a more meritocratic world is a dangerous illusion. The advent of universal suffrage and the end of property qualifications for voting (which in the nineteenth century limited the right to vote to people meeting a minimum wealth requirement, typically the wealthiest 1 or 2 percent in France and Britain in 1820–1840, or about the same percentage of the population as was subject to the wealth tax in France in 2000–2010), ended the legal domination of politics by the wealthy.⁵⁸ But it did not abolish the economic forces capable of producing a society of rentiers.

The Return of Inherited Wealth: A European or Global Phenomenon?

Can our results concerning the return of inherited wealth in France be extended to other countries? In view of the limitations of the available data, it is unfortunately impossible to give a precise answer to this question. There are apparently no other countries with estate records as rich and comprehensive as the French data. Nevertheless, a number of points seem to be well established. First, the imperfect data collected to date for other European coun-

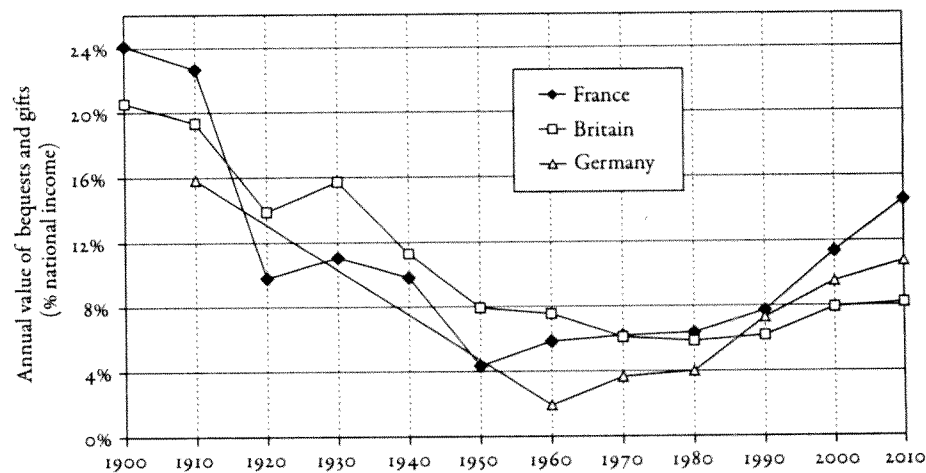


FIGURE 11.12. The inheritance flow in Europe, 1900–2010

The inheritance flow follows a U-shape in curve in France as well as in the United Kingdom and Germany. It is possible that gifts are underestimated in the United Kingdom at the end of the period.

Sources and series: see piketty.pse.ens.fr/capital21c.

tries, especially Germany and Britain, suggest that the U-shaped curve of inheritance flows in France in the twentieth century actually reflects the reality everywhere in Europe (see Figure 11.12).

In Germany, in particular, available estimates—unfortunately based on a limited number of years—suggest that inheritance flows collapsed even further than in France following the shocks of 1914–1945, from about 16 percent of national income in 1910 to just 2 percent in 1960. Since then they have risen sharply and steadily, with an acceleration in 1980–1990, until in 2000–2010 they attained a level of 10–11 percent of national income. This is lower than in France (where the figure for 2010 was about 15 percent of national income), but since Germany started from a lower point in 1950–1960, the rebound of inheritance flows has actually been stronger there. In addition, the current difference between flows in France and Germany is entirely due to the difference in the capital/income ratio (β , presented in Part Two). If total private wealth in Germany were to rise to the same level as in France, the inheritance flows would also equalize (all other things being equal). It is also interesting to note that the strong rebound of inheritance flows in Germany is largely due

to a very sharp increase in gifts, just as in France. The annual volume of gifts recorded by the German authorities represented the equivalent of 10–20 percent of the total amount of inheritances before 1970–1980. Thereafter it rose gradually to about 60 percent in 2000–2010. Finally, the smaller inheritance flow in Germany in 1910 was largely a result of more rapid demographic growth north of the Rhine at that time (the “ m effect,” as it were). By the same token, because German demographic growth today is stagnant, it is possible that inheritance flows there will exceed those in France in the decades to come.⁵⁹ Other European countries affected by demographic decline and a falling birthrate, such as Italy and Spain, should obey a similar logic, although we unfortunately have no reliable historical data on inheritance flows in these two cases.

As for Britain, inheritance flows there at the turn of the twentieth century were approximately the same as in France: 20–25 percent of national income.⁶⁰ The inheritance flow did not fall as far as in France or Germany after the two world wars, and this seems consistent with the fact that the stock of private wealth was less violently affected (the β effect) and that wealth accumulation was not set back as far (μ effect). The annual inheritance and gift flow fell to about 8 percent of national income in 1950–1960 and to 6 percent in 1970–1980. The rebound since the 1980s has been significant but not as strong as in France or Germany: according to the available data, the inheritance flow in Britain in 2000–2010 was just over 8 percent of national income.

In the abstract, several explanations are possible. The lower British inheritance flow might be due to the fact that a larger share of private wealth is held in pension funds and is therefore not transmissible to descendants. This can only be a small part of the explanation, however, because pension funds account for only 15–20 percent of the British private capital stock. Furthermore, it is by no means certain that life-cycle wealth is supplanting transmissible wealth: logically speaking, the two types of wealth should be added together, so that a country that relies more on pension funds to finance its retirements should be able to accumulate a larger total stock of private wealth and perhaps to invest part of this in other countries.⁶¹

It is also possible that the lower inheritance flow in Britain is due to different psychological attitudes toward savings and familial gifts and bequests. Before reaching that conclusion, however, it is important to note that the difference observed in 2000–2010 can be explained entirely by a lower level of

gift giving in Britain, where gifts have remained stable at about 10 percent of the total amount of inheritances since 1970–1980, whereas gift giving in France and Germany increased to 60–80 percent of the total. Given the difficulty of recording gifts and correcting for different national practices, the gap seems somewhat suspect, and it cannot be ruled out that it is due, at least in part, to an underestimation of gift giving in Britain. In the current state of the data, it is unfortunately impossible to say with certainty whether the smaller rebound of inheritance flows in Britain reflects an actual difference in behavior (Britons with means consume more of their wealth and pass on less to their children than their French and German counterparts) or a purely statistical bias. (If we applied the same gift/inheritance ratio that we observe in France and Germany, the British inheritance flow in 2000–2010 would be on the order of 15 percent of national income, as in France.)

The available inheritance sources for the United States pose even more difficult problems. The federal estate tax, created in 1916, has never applied to more than a small minority of estates (generally less than 2 percent), and the requirements for declaring gifts are also fairly limited, so that the statistical data derived from this tax leave much to be desired. It is unfortunately impossible to make up for this lack by relying on other sources. In particular, bequests and gifts are notoriously underestimated in surveys conducted by national statistical bureaus. This leaves major gaps in our knowledge, which all too many studies based on such surveys forget. In France, for example, we find that gifts and bequests declared in the surveys represent barely half the flow observed in the fiscal data (which is only a lower bound on the actual flow, since exempt assets such as life insurance contracts are omitted). Clearly, the individuals surveyed tend to forget to declare what they actually received and to present the history of their fortunes in the most favorable light (which is in itself an interesting fact about how inheritance is seen in modern society).⁶² In many countries, including the United States, it is unfortunately impossible to compare the survey data with fiscal records. But there is no reason to believe that the underestimation by survey participants is any smaller than in France, especially since the public perception of inherited wealth is at least as negative in the United States.

In any case, the unreliability of the US sources makes it very difficult to study the historical evolution of inheritance flows in the United States with any precision. This partly explains the intensity of the controversy that erupted

in the 1980s over two diametrically opposed economic theories: Modigliani's life-cycle theory, and with it the idea that inherited wealth accounts for only 20–30 percent of total US capital, and the Kotlikoff-Summers thesis, according to which inherited wealth accounts for 70–80 percent of total capital. I was a young student when I discovered this work in the 1990s, and the controversy stunned me: how could such a dramatic disagreement exist among serious economists? Note, first of all, that both sides in the dispute relied on rather poor quality data from the late 1960s and early 1970s. If we reexamine their estimates in light of the data available today, it seems that the truth lies somewhere between the two positions but significantly closer to Kotlikoff-Summers than Modigliani: inherited wealth probably accounted for at least 50–60 percent of total private capital in the United States in 1970–1980.⁶³ More generally, if one tries to estimate for the United States the evolution of the share of inherited wealth over the course of the twentieth century, as we did for France in Figure 11.7 (on the basis of much more complete data), it seems that the U-shaped curve was less pronounced in the United States and that the share of inherited wealth was somewhat smaller than in France at both the turn of the twentieth century and the turn of the twenty-first (and slightly larger in 1950–1970). The main reason for this is the higher rate of demographic growth in the United States, which implies a smaller capital/income ratio (β effect) and a less pronounced aging of wealth (m and μ effects). The difference should not be exaggerated, however: inheritance also plays an important role in the United States. Above all, it once again bears emphasizing that this difference between Europe and the United States has little to do a priori with eternal cultural differences: it seems to be explained mainly by differences in demographic structure and population growth. If population growth in the United States someday decreases, as long-term forecasts suggest it will, then inherited wealth will probably rebound as strongly there as in Europe.

As for the poor and emerging countries, we unfortunately lack reliable historical sources concerning inherited wealth and its evolution. It seems plausible that if demographic and economic growth ultimately decrease, as they are likely to do this century, then inherited wealth will acquire as much importance in most countries as it has had in low-growth countries throughout history. In countries that experience negative demographic growth, inherited wealth could even take on hitherto unprecedented importance. It is impor-

tant to point out, however, that this will take time. With the rate of growth currently observed in emergent countries such as China, it seems clear that inheritance flows are for the time being quite limited. For working-age Chinese, who are currently experiencing income growth of 5–10 percent a year, wealth in the vast majority of cases comes primarily from savings and not from grandparents, whose income was many times smaller. The global rebound of inherited wealth will no doubt be an important feature of the twenty-first century, but for some decades to come it will affect mainly Europe and to a lesser degree the United States.