

5830

## GIFTS, WILLS AND INHERITANCE LAW

Pierre Pestieau

*CREPP, Université de Liège and CORE, Université Catholique de Louvain*

© Copyright 1999 Pierre Pestieau

### Abstract

This chapter provides a survey of recent theoretical and empirical work on bequeathing from the viewpoint of both economics, and law and economics. We focus on the interaction between individuals' preferences, legal and fiscal institutions and bequeathing. Two conclusions emerge. First, it appears clearly that the level, the pattern and the timing of bequests depend on both the preferences of the donors and the type of regulation and taxation imposed on inheritance. Second, and conversely, the desirability of such taxation and regulation depends closely on the type of bequests (voluntary or involuntary) that one observes in a given country in a given period.

*JEL classification:* D30, D64, D91, H24

*Keywords:* Bequests, Inheritance, Gift, Estate Duty

### 1. Introduction

In this chapter, we want to focus on rather recent literature that studies the interaction between preferences, institutions and bequests. More explicitly, we want to convey the now well established idea that the level, the timing and the pattern of bequests is the outcome of the underlying preferences of the bequeathing parents on the one hand and the prevailing legal and fiscal institutions constraining bequests on the other.

To do so, we start with the setting in which bequeathing is effected, that is, the complex network of family relations. The family is indeed the locus of various transfers and exchanges, either in competition with, or as a complement to, the state or the market. Admittedly, the distinction between exchange and transfer within the family is not all that clear-cut. Even though 'pure' transfers do not imply explicit counterparts, the simple fact that they bring utility to the donor makes them less free than it might seem.

Our concern here is with the legal regulation and fiscal treatment of exchanges or transfers between parents and children, which may be monetary or in kind. In addition to wealth transfers such as bequests and gifts, there is also the education that parents provide to their offspring through an investment in both time and money, not to mention the transmission of intangible social

capital. There are also different types of assistance, often in the form of services: these may be descending (providing accommodation or care to grandchildren) or ascending (care, visits or accommodating elderly parents).

Even though we focus here on the most traditional type of intergenerational transfers, that is, bequests, all the other types play an important role, either as a complement or as a means of exchange. We survey recent work on the desirability of estate or inheritance taxation and of legal constraints imposed upon bequeathing. To deal with this issue, we introduce a taxonomy of the main types of bequests and models of inheritance developed by economists over the last decades. Each of these models, which focus on specific *motivations* for wealth transmission, is characterized by the kind of relations existing within the family, the structure of preferences, the type of information held by each member of the family and, of course, his or her own characteristics such as ability or life expectancy. It will become apparent that this taxonomy is very different from the popular image of inheritance and that the economic approach does not follow the same track as the one adopted by other social scientists (Masson, 1995). More importantly, we will point out the multiple and divergent *implications* that each of these types of inheritance may have when assessing the desirability of fiscal and legal regulation of inheritance.

## 2. Taxonomy of Bequests

Inherited wealth is generally quite unequally distributed (a great deal more than income). In countries like France, it accounts for a large part of all wealth possessed (generally estimated at 40 percent) and represents the largest descending monetary transfer, three times as much as wealth received in the form of *inter vivos* gifts, for example.

Although the inheritor may very well not know the motivations behind the decision to leave him or her a bequest, it is clear that they may be diverse and sometimes contradictory. In fact, there exist three large categories of inheritance:

- *accidental, or unplanned, bequests*, characterized not primarily by the desire to transmit wealth to offspring, but by precaution or consumption deferred over an uncertain life span;
- *voluntary, or planned, bequests*, falling into different categories depending on the motives for the transmission. They range from *pure altruism* to *paternalistic behavior* all the way to the most self-interested *strategic exchange*.
- *capitalist, or entrepreneurial, bequests*, which are the outcome of accumulation for its own sake.

Our taxonomy of bequests is based on two dividing lines: the consumer's horizon and the concern for family. Accidental bequests are typically limited to the consumer's life cycle. Voluntary bequests are essentially based on *family* considerations. Capitalist bequests commonly have a horizon that extends well beyond the lifetime of the wealth holder; they are not primarily motivated by family considerations even though the dynastic family is used as the channel allowing for the perennity of the estate.

These distinctions may sound superfluous. Yet, as we hope to make clear, they are of crucial importance. The implications and consequences that a bequest may have for the level and structure of estate duties (for example) largely depend on the category it belongs to.

### *2.1 Accidental Bequests*

Even if parents accumulate wealth only in provision for their old age, as the theory of the life cycle claims, and have no particular desire to leave something to their children, the latter will probably still receive an inheritance. This kind of bequest, termed accidental, is generally associated with the concepts of precautionary savings and deferred consumption. It owes its existence to three factors: the uncertainty over one's life span, the imperfection of capital markets (pertaining to, for example, annuities or housing) and the impossibility of leaving a negative inheritance. In a world of certainty, savings would be adjusted to match the needs of the life cycle only; if annuities were available at an actuarially fair rate, one could protect oneself against the risk of an excessively long and penniless existence. Under these conditions, there seems to be no purpose in leaving a bequest that is of no particular use in itself.

To illustrate the accidental bequest (see, for example, Davies, 1981), let us take the case of a couple of retirees who are entitled only to a small pension and have not taken out annuities. Anticipating a long and comfortable retirement, they have accumulated financial and real estate assets that they hope to live on. They subsequently die in a car accident, leaving their children an inheritance they were not counting on.

All things being equal, the accidental inheritance is larger should death occur at the moment in the life cycle when wealth is at its peak, usually at the end of the person's working life. In this type of inheritance, there is no exchange or altruism between parents and children. The children inherit only because their parents did not live as long as they had expected to and had not invested their savings in a life annuity.

One could raise the question of why annuity markets are not well developed. There might be no demand for them because of some social norms. In France, for example, buying annuities is viewed as an act of distrust toward one's children. This leads to another point about accidental bequests. Suppose that parents are altruistic toward their children but would not leave them anything

if fair annuities were available, because their children are well-provided for through the secular growth in wages. In the absence of annuities, these parents know that some bequest will inevitably be left and may find this highly desirable.

### 2.2 Voluntary Bequests

In accidental bequests, neither the presence of children nor even of heirs is required. Voluntary bequests, on the other hand, depend on the presence of children. It was long held that intentional bequests were the norm and, even more so, were motivated by altruism. The anthropology and sociology of the family have since taught us, however, that many different forms of voluntary bequests and family models exist. At one extreme, there is the family in which solidarity and generosity prevail, while, at the other extreme, there is the model of give and take in which exchange is sometimes equitable and sometimes not. We will move gradually from pure altruism to strategic exchange, which gives rise to an arrangement rather unfavorable to children.

*Altruistic Bequests* The stereotyped representation of inheritance clearly corresponds to the model based on *pure altruism*; that is, parental love and filial piety (classical references are Becker, 1974, 1975, 1989, 1991; Becker and Tomes, 1979, 1986; and Barro, 1974). When making decisions on consumption and savings, parents take into account their children's preferences while anticipating their income and future needs. Their utility function implies that, in the absence of constraints, they will attempt to distribute their incomes and those of their children over time so as to *smooth out* the consumption of both parties. The concept of smoothing is already present in the life cycle hypothesis, where the consumption path is independent of the income path, but it is here extended to the infinite duration of a dynasty (smoothing is clearly limited by the constraint of nonnegative bequests when children are wealthier than their parents).

In this context, parents have two ways of raising their children's resources: human capital (education) transfers increase their wages and nonhuman transfers, their financial wealth. The parents choose the amount they wish to invest in their children's education and that to be given them in the form of *inter vivos* gifts or bequests. Their sole objective is to ensure that consumption will be divided fairly either between them and their children or among the children. Insofar as the return on education is variable - at first it is a great deal higher than that of financial assets, before it diminishes - parents cover educational costs until the return on education is equal to that of physical assets; thereafter, they make *inter vivos* gifts or bequests so as to maximize the utility of the extended family.

Choices such as these have immediate implications. If inequalities of talents or fortune exist between parents and children or between children themselves, intergenerational transfers will be tuned so as to reduce them if not eliminate

them entirely. Let us take the case of two brothers: one is gifted and will have no problem acquiring a top-flight education, while his brother, unable to obtain qualifications of any kind, will be forced to take a menial job. In an altruistic environment, the latter should receive a great deal more from his parents than his brother; however, it is probable that, strictly in terms of education costs, the opposite will be true. In a model where differences in talent are contingent on circumstances and where the brothers enjoy the same standard of living thanks to their parents' *compensatory* transfers, the members of the following generation all start from the same position. Thus, if parents are not prevented from exercising free choice for reasons connected to their wealth, altruism or luck itself, there should be great social stability within the dynasty. Intrafamily transfers insure each member against the vagaries of fate or nature.

Yet, there are limits to parental choice; problems of incentives, moral hazard and adverse selection cannot be avoided. In making their transfers, parents would like to be sure that their children really need them and will not rely on them to the extent of shirking responsibility for the rest of their lives (see Bruce and Waldman, 1990; Linbeck and Weibull, 1988; Cremer and Pestieau, 1993, 1996; Richter, 1992). But it is often argued that even though parents cannot forgo problems linked to asymmetric information, they are in a much better position than the government. This relative superiority of the parents is often viewed as a key argument against any public interference with private intergenerational transfers.

Moreover, parents may not be able to transfer as much as they might wish. In this case, they will give priority to investments in human capital, where the return is greater than that on physical investments. The latter will thereby not be able to perform their role as buffers, and parent-child as well as child-child inequalities may subsist.

Note that altruism in the neoclassical sense of the term is not to be confused with generosity or disinterest. Quite often, one makes a distinction between altruistic households, which leave positive (operative) bequests, and those which are constrained by the nonnegativity constraint on bequests (if they could, they would force their children into giving them resources) and thus do not leave any. One cannot say that the former are more altruistic than the latter.

*Paternalistic Bequests* The paternalistic bequest shares the same bloodline as the altruistic (see Blinder, 1974, 1976a; Modigliani and Brumberg, 1954). Paternalistic parents also accumulate savings with the intention of transmitting them to their children. Yet, the amount and structure of the bequest are based not on their children's preferences, but rather on their idea of what is good for their children, or uniquely on the pleasure they might derive from giving. One often refers to the bequest-as-consumption model because bequest appears in the parents' utility function as any other consumption goods. Although it is

possible for paternalistic and altruistic bequests to coincide, generally speaking, this is not the case. Paternalistic bequests might consist of assets that the heir does not really need, such as family possessions bequeathed inopportunistically, that is, without the economic situation of the children being taken into account.

A variant of the paternalistic bequest, put forward in particular by Modigliani (1986), assumes that the amount of the bequest does not depend on the *absolute* amount of the family's resources, but rather on its *relative* value within the generation to which it belongs, the idea being that a family's consumption needs tend to increase with economic growth from one generation to the next.

*Retrospective Bequests* We now come to a category of models that share a number of common features: (i) the bequest is motivated by altruism that is labeled *ad hoc* relative to pure altruism *à la* Barro-Becker; (ii) information is limited and the forecast imperfect, so parents decide to leave their children a bequest commensurate to what they themselves received; (iii) the implicit rule 'Do unto your children as you would have liked your parents to have done unto you' is rooted in social norms of *deferred reciprocity*, as if bequests were made to one's children *in return* for inheritance received from one's parent. This social, or rather family, norm is related to what sociologists call *habitus*.

Usually these models are cast in a three-generation setting and lead to social optimality if not the Golden Rule. However, this optimal equilibrium is not a market one but one that is based on a commitment to a perennial norm. Even though this commitment is Pareto optimal, one cannot exclude the possibility of rupture in the intergenerational social compact. Bevan (1979), Bevan and Stiglitz (1979), Cigno (1995), and Cox and Stark (1994) have developed models for this category of bequests.

*Bequests Based on Pure Exchange* Intergenerational exchange was common in traditional societies. Parents took care of their children until they reached adulthood and promised to leave them an inheritance (often their work tools). In exchange, children promised to look after their parents once they reached old age, or even earlier in the event of failing health. This type of bequest, known as bequest-as-exchange, is still practiced in rural areas and is related to the *old-age security* hypothesis that is used to explain fertility.

There are a wide variety of bequest-as-exchange models; they have in common that parents care about some service or action undertaken by their children especially to secure old-age needs, and that the education and bequests are the payment for this service or this action. They differ in the nature of what is exchanged, in the timing of the exchange and in the enforcement mechanism (courts, altruism, economic punishment or rewards). Why not always rely on the market? When the market option is rejected, it is primarily because of higher transaction costs. The family is capable of carrying out the tasks of

middlemen or insurers much more cheaply than commercial companies. In addition, family members have more complete information on the risk of illness or death when financing retirement and on individual talents and motivations when financing education. In the traditional family, for instance, the weight of custom and geographic immobility helped ensure that these engagements were honored.

In Kotlikoff and Spivak (1981), exchange leads to an annuity-type contract; in Cox (1987), one has an exchange of services; in Cox (1990), one finds a scheme of loans by parents that are mutually advantageous; Desai and Shah (1983) study the old-age security hypothesis within traditional families.

In the same vein, Stark (1995), Becker (1993) and Cremer and Pestieau (1993) have introduced the idea of 'preference shaping' through education as a means to facilitate and secure exchange in general and support in particular. They consider a two-stage model. In the first stage, parents attempt to inculcate values in their children; in the second, when those values (guilt for misbehavior) have been imparted, children are ready to trade attention for bequests in terms that are quite favorable to their parents.

The exchange-bequest models are most often cast in a setting implying efficient, if not fair, allocations between parents and children. Such a setting mimics that of a competitive market economy. In a quite distinct stream of literature, one finds the dissonant view of Buchanan (1983) who focuses on the rent-seeking aspect of inheritance. He argues that this represents a substantial source of wasteful investment and a significant economic inefficiency (this view is disputed by Anderson and Brown, 1985).

*Strategic Bequests* In the modern family, it is easy and unfortunately common for children not to come to the aid of their elderly parents. However, filial ingratitude is hardly a new phenomenon. Two famous literary representations come to mind. The misfortunes of Shakespeare's King Lear are well known, but Balzac's Père Goriot experienced a hardly less tragic fate: 'He had given his heart and soul for twenty years, his fortune in one day. When the lemon had been squeezed dry, his daughters dropped the peel at the corner of the street.' These two works show why more than one parent has eschewed premature bequeathing.

This leads us quite naturally to a particular type of bequest, the strategic bequest, which in many respects belongs to the bequest-as-exchange category. It is one of the ways of enforcing exchange within the family when there is a time lag between the giving and the receiving and there is no credible recourse to the legal power of the courts and the state (see Bernheim, Schleifer and Summers, 1985. There are other bequest-as-exchange models with strategic features, although less pronounced; see, for example, Cox, 1987.)

The model poses in a family with two children. Each child wants to receive as large an inheritance as possible; at the same time, spending time with aging

parents is costly (at least beyond a certain threshold) in terms of forgone leisure or earnings in the market. The game follows a precise chronology. First, the parents make a commitment as to the total amount of the bequest and to a rule whereby this amount will be divided up according to the level of attention provided by each child. For these promises to be credible, the commitment must be binding. Thereafter, the children do not cooperate with each other and each gives his parents the amount of attention he considers optimal given the inheritance he will derive from it. Following the death of both parents, the inheritance is divided as stipulated. It is clear that the trump card in this game is held by the parents. Operating according to the adage 'divide and conquer', they extract the maximum from each of their children under the threat of disinheriting them.

### 2.3 Capitalist Bequests

The term *capitalist*, or *entrepreneurial bequests* evokes the image of the entrepreneur found in Ricardo (1817) and classical economists in general (see also Moore, 1979): an austere individual infused with the Weberian Protestant ethic, investing everything he earns and extending the influence of his decision making beyond his own existence. While accidental inheritance touches all classes of society, this type concerns only the well-to-do. (For an empirical test, see Arrondel and Lafferère, 1996, who distinguish the behavior of wealthy households from that of the 'top-heavy' ones.) The famous American billionaire Howard Hughes, who left behind a vast financial empire but no direct heir upon his death a couple of decades ago, comes to mind. This is the prototype of wealth so great that it may not be consumed in a single lifetime. It has an existence of its own that in a way exceeds its owner's control. Even access to the annuity market and knowledge of one's lifespan would not change the situation in the least. Parents in possession of such wealth, even those devoid of any concern for their family, have no choice but to bequeath it, most likely to their children in societies where the latter may not be disinherited. In any event, there will be an estate whether there are children or not. Such is the example of Alfred Nobel, who left his wealth not to his family but to the well-known Nobel Foundation.

So far, we have focused on one factor: the very impossibility of spending an excessive amount of wealth in one generation (this applies to the 1 percent richest families, who, in most countries, possess nearly one-quarter of all wealth). There is another motivation in capitalist bequest: the desire to leave a perennial trace, a financial or industrial dynasty. One thus thinks of individuals such as John D. Rockefeller. Children and grandchildren are then needed not so much out of altruism, but as a necessary means of perpetuation. There is a formal analogy between this type of bequest and those left out of altruism in the Becker-Barro model.

Lying behind these types of bequests is a whole range of behavior, all the way from pure altruism to selfish manipulation and absolute indifference to the children. From a normative point of view, many will prefer altruistic behavior, but in reality, one finds a little of everything (reality is not as schematic as our categories).

What might the interest of this typology be? Is it important to know if certain types of behavior become more frequent and others less so in different times and places? (For the empirical evidence concerning the relative importance of these types of inheritance, see Arrondel, Masson and Pestieau, 1997, and Bernheim, 1991.) Might the likely shift in behavior in the direction of exchange and strategic attitudes be indicative of a change in values? This is not our most immediate concern. We are more interested in the different types of inheritance because each has specific *implications* for the desirability of adopting particular legal or fiscal regulation of giving and bequeathing. Taking an example from a purely economic viewpoint, taxing accidental bequests is harmless because it has no disincentive effect on that type of saving. The other types of bequests, on the other hand, can be badly affected by taxation. As stated, this is a purely economic viewpoint. One might object from another viewpoint that any inheritance taxation, regardless of the motivation, involves a repugnant confiscatory aspect. We now turn to this debate.

### 3. Taxing Bequests

*3.1 Two Polar Views* (for a presentation of these and other views, see Erreygers, 1997; Masson and Pestieau, 1994)

Debate over inheritance and its legitimacy has often focused on whether it should be taxed. Quite often, among political scientists and philosophers more than economists, one finds two extreme positions. The first argues that taxing inheritance would allow society to move toward more equality, especially equality of starting conditions in life, without disrupting economic incentives, particularly those concerning work and saving. This position, which can be labeled as one of minimal liberty, assumes that a person has no right at all to decide what should happen with his or her property after his or her death; in this view, property rights do not include a natural right to bequest (see, for example, Haslett, 1994). The second position argues that taxing inheritance is not only illegitimate but destructive because it disrupts the delicate framework of incentives that regulate economic activities. This second position is notably advocated by Bracewell-Milnes (1989) and by the Public Choice school's founders, James Buchanan and Gordon Tullock (see Buchanan, 1983, and Tullock, 1971). Tullock's paper was followed by a number of interesting comments (Greene, 1973; Koller, 1973; Ireland, 1973) and a reply by Tullock

(1973). Following this view, every person has the right to decide what should happen with his or her property after his or her death. Accordingly, the right of bequest is a natural right. Quite clearly these two positions are fostered by different attitudes toward liberty and equality. They are concerned with basic principles and not with the actual implications for distributive justice and economic efficiency. Put another way, the first position postulates rather than demonstrates that a 100 percent tax on inheritance has no inefficiency effects and leads to a more equal distribution of wealth and eventually of income. The second position, on the contrary, finds any tax on bequests not only repugnant but inoperable as a means of redistributing wealth. The majority of thinkers, and particularly of economists, tend to take a middle position between the two extremes.

### 3.2 *The Middle Position: A Trade-Off Between Equity and Efficiency*

The position generally taken on this issue of inheritance taxation is one of pragmatism. Making explicit the objectives of taxing authorities, inheritance taxation is deemed desirable if it can achieve some redistribution across and within generations without hurting production and growth. Actually, the extent of taxation will depend on the trade-off between equity and efficiency and this is an empirical and not an ideological matter. If, for example, it can be shown that equity can be achieved without much efficiency cost, then taxation of bequests and *inter vivos* gifts is desirable.

The taxonomy of bequests above is very useful in coping with this issue. Indeed, wealth-transfer taxation will have allocative (efficiency) and redistributive (equity) implications that depend heavily on the type of bequest. We start with the redistributive implications. The clear dividing line on this matter is between (unconstrained) altruistic bequests and all others. In an altruistic world consisting of identical (dynastic) families, we should let the *pater familias* redistribute resources *across* and *within* generations. Estate taxation is then undesirable. However, if income differences are wider across families than within families, there arises a delicate trade-off between two types of redistribution: public and private. The case for estate taxation is enhanced if between-families inequality is higher than within-family inequality and if the efficiency cost of public redistribution is not much higher than that of private redistribution. This is true only of altruistic bequests. For all other types of bequests, estate taxation is always desirable on redistribution grounds.

Let us now turn to efficiency considerations and analyze the allocative effects of a distortionary estate tax. We assume that the government runs a balanced budget and that the tax revenue is spent on public goods that enter agents' utility in an additive way. In other words, we focus on just the uncompensated price effect of wealth-transfer taxation. In the altruistic model, when bequests are operative before and after the tax change, estate taxation

discourages capital accumulation. (Bernheim and Bagwell, 1988 argue that, with pure altruism and marriage, we are all interconnected through bequests and this makes all taxes nondistortionary. They use this overall neutrality argument to emphasize the limits of altruism.) In the case of accidental bequests, estate taxation has no effect on saving. In the other models, bequest-as-consumption or bequest-as-exchange, taxing bequest is equivalent to taxing a particular type of future consumption.

Does that mean that basically it is not desirable to tax wealth transfer? Not at all. Even when such a tax has a depressive effect on the capital-labor ratio, it can still increase welfare, granted that the overall economy is dynamically inefficient - namely, there is too much capital. Further, even with dynamic efficiency, the desirability of a wealth-transfer tax is a general equilibrium matter that ought to be dealt with in the framework of optimal taxation theory.

This section, as well as the current state of the literature on estate taxation, may leave the reader with the impression that the issue is so complicated that nothing can be said. Our own reading of the theoretical literature on inheritance taxation and of the empirical literature on the relative importance of alternative forms of bequests is that progressive inheritance taxation is desirable for both efficiency and equity reasons. The problem, if any, is one of compliance. In open economies with mobility of financial capital, the implementation of inheritance taxation is very difficult. All OECD countries collect less than 0.5 percent of their tax revenues through inheritance taxation in spite of rather high statutory rates.

#### **4. Freedom of Bequeathing**

##### *4.1 Equal Division: Some Evidence*

The debate over the treatment of intergenerational transfer is not restricted to the issue of taxation; for taxation is only one way to restrict the freedom of bequeathing. In fact, one source of debate has been the opposition between the Anglo-Saxon view and the Napoleonic view of inheritance. The first implies freedom of bequests, the only restriction being estate taxation (the tax base is the total amount of the estate left by the deceased, and the tax liability is independent of the number or quality of heirs). Note that when there is no will, equal sharing is the rule. The latter implies equal sharing of the estate among children, but for a limited part that the deceased can allocate freely by writing a will. Within the framework, one has a so-called inheritance tax, whereby the tax base is the amount received by each heir and the rates depend on the degree of consanguinity.

These different legal regimes can play an important role in shaping wealth distribution. It is therefore interesting to see their actual implications by comparing the French and the American situations. Let us consider the US

estates cases. Tomes (1981, 1988a and 1988b), whose work is based on *heirs' declarations*, concludes that exact equality is achieved in one-fifth of the cases and 'approximate' equality in less than half. Other authors, who confine themselves to information contained in *probate records*, find a much greater incidence of equal sharing. In families with two children, for example, exact equality is observed in approximately 70 percent of the cases (63 percent in Menchik, 1980a; 87 percent in Menchik, 1988; 81 percent in Bennett, 1990; 63 percent in Jouflaian, 1993; 69 percent in Wilhem, 1996) versus only 22 percent in Tomes. Moreover, primogeniture represents less than 10 percent of the cases, and the frequency of equal sharing is *higher* among wealthy households. Finally, the transmission of an indivisible professional asset often leads to unequal sharing only if there is no other wealth that can compensate children left out of the professional bequest. There is thus hardly any doubt that equal sharing is the most frequent official practice in the US. Does that mean that making equal estate sharing mandatory in the US would not be binding for most households and would thus have no consequence? Not necessarily. As the strategic bequest model shows, what matters is the threat of disinheritance, even though the final outcome is equal sharing.

In France, less than 8 percent of the estates are unequally divided (see Arrondel and Laferrère, 1992). These cases concern mainly the *rich* (contrary to the situation in the US) and the self-employed with many children and an illiquid or indivisible bequest (professional assets, real estate). Moreover, inheritance shares remain generally equal, the redistribution among siblings being achieved mainly through previous gifts (80 percent of the cases).

It remains to determine whether unequal shares compensate the less-privileged child. There is some evidence in the US that girls, assumed to receive less education or to care more for parents, are slightly advantaged (Menchik, 1980a, 1980b; Bennett, 1990). Otherwise, evidence is mixed. Tomes (1981, 1988a, 1988b) finds significant compensatory effects, but other authors (Menchik, 1988; Wilhem, 1996) do not find any significant correlation between children's *observable* characteristics and the relative amount of inheritance received. This ambiguous conclusion is also drawn for France by Arrondel and Lafferère (1992). Indeed, the French or American studies (apart from Tomes's) can explain when unequal estate division occurs, but not the rationale underlying the distribution.

#### 4.2 Inheritance Rules: Motivations and Implications

Inheritance rules are not necessarily imposed by law. In this matter as in many others, tradition and custom are a much more effective way to regulate bequeathing. Bergstrom (1996), for example, refers to several anthropological studies that examine particular rules such as 'partible patrilineal inheritance' in central Tibet, whereby 'in families that had male offspring, inheritance was

in principle divided equally among them; in families that had no sons, inheritance was passed to a daughter'.

Certainly there are many rules besides those of traditional equal division and (male) primogeniture. Each of them, enforced by law or by tradition, has or had a reasonable explanation and interesting implications. For example, as shown by Brenner (1985), the equal-division rule was imposed in the English Middle Ages during a rather short period characterized by 'the mistreatment of both stepchildren by step-parents and younger children by their older brothers and sisters' (p. 96). Cyrus Chu (1991) explains the practice of primogeniture in education in imperial China: the whole family pooled its money to subsidize just one child for his human capital investment in the hope he would move up the social ladder and bring honor and prestige to the family (see also Van de Gaer and Crisologo, 1999, who study inheritance rules in the Philippines).

The economists are, however, much more interested in the implications than in the historical cause of alternative inheritance rules. A number of scholars (Stiglitz, 1969; Pryor, 1973; Blinder, 1973, 1976b; Atkinson, 1980; Davies, 1982; Laitner, 1988, 1991; Van de Gaer, 1997) have thus studied the expected effects of alternative inheritance rules combined with marriage patterns on the distribution of wealth. Not surprisingly, in these models, where compensatory bequests are assumed away, random marriage and equal division are strong factors of wealth equality.

In all this investigation, fertility is assumed fixed. It is, however, interesting to note that fertility can be affected by inheritance rules. The French case is enlightening in that respect. Until the Revolution, each region had its own customs. As shown by Rosental (1991), fertility was much higher in regions subject to primogeniture than in regions subject to equal division. In the latter, the only way to avoid splitting a family's property was to have at most two children.

#### *4.3 Wills and Strategic Bequests*

Quite interesting in the debate over the freedom of bequests is the fact that the alternative positions range from one giving all the power to the parent-donor to one implying a confiscatory 100 percent inheritance tax. One can view the practice of many countries, that is, imposing an effectively small inheritance tax along with mandatory equal estate division among children, as an intermediate position that limits the discretionary power of parents.

In a society where equal estate sharing is the rule, there is less risk of opportunism on the side of the testator. In fact, with such a rule, there is little room for wills. Empirically, there are fewer wills in countries such as France and Germany where the equal division rule applies, than in the US or the UK where there is full freedom of bequest. As pointed out by De Geest (1995) in reviewing literature on the economics of wills, 'Much remains to be said about

the forms of opportunism which testaments can prevent as well as create' (p. 13). In the models of strategic bequests discussed above, the testator fully uses the possibility of opportunism that is given to him or to her by the legal practice of wills. Accordingly, the testament is not the outcome of a contract; it can be revoked at any time, and its content can even be kept secret. Not only the testament can be kept secret, but also the size of the estate. Note that in Bernheim, Schleifer and Summers (1985), the outcome is efficient even though the testator gets all the trade surplus. Yet, this only works if the inheritance rules and the size of the estate are known by the competing heirs. It would be an interesting avenue for future research to study the economics of wills through the alternative models of strategic and exchange bequests.

When equal division is imposed, there is no room for strategic bequests and it is not even certain that the outcome is efficient. In a number of papers (Cremer and Pestieau, 1996), it appears clearly that the only way to induce children to perform and not to shirk responsibility while waiting for an inheritance is to allow their parents the possibility of disinheriting them. At equilibrium, there is no disinheriting but its threat is necessary. In these models, one sees that mandatory equal division is clearly a source of inefficiency or, to put it otherwise, that freedom of bequeathing is a factor of efficiency.

## **5. Conclusion**

In this chapter, we have presented a number of alternative models of inheritance and then discussed the implications of each of them for the desirability of inheritance taxation. It appears that the dividing line is clearly between models with altruistic bequests that are fully operative and all the other inheritance models.

In a number of countries, the debate on inheritance taxation and on the freedom of bequeathing is lively. The practical problem inherent in inheritance taxation is that whatever the quality of arguments presented in favor of such a taxation, in the reality it brings little revenue to the state regardless of the statutory rates. In all OECD countries, inheritance and gifts taxation represents less than 1 percent of all public revenues. Yields are not only low, but often deemed unfair. After all, estate taxation is often called 'the tax on sudden death'.

The issue of whether bequeathing should be constrained is of a slightly different nature. It is interesting to remember that at one point in its history equal sharing was imposed in the UK because there were too many cases of unfair treatment of stepchildren (see, Brenner, 1985). Equal sharing avoids that kind of inequity, but, at the same time, it prevents parents from compensating their children for unequal incomes or opportunities. One has the feeling that, in a number of countries, the trend is now in favor of increasing freedom of

bequeathing. This hopefully implies an increasing trust in the judgment and the maturity of individuals in dealing with the intergenerational distribution of resources.

### Acknowledgments

I wish to thank Gerrit De Geest, Marty Crowe, and an anonymous referee for helpful comments and suggestions.

### Bibliography on Gifts, Wills and Inheritance Law (5830)

- Anderson, Gary M. and Brown, P.J. (1985), 'Heir Pollution: A Note on Buchanan's "Law of Succession" and Tullock's "Blind Spot"', *5 International Review of Law and Economics*, 15-23.
- Arrondel, L. and Lafferère, A. (1992), 'Les Partages Inégaux des Successions entre Frères et Soeurs', *250 Economie et Statistique*, 29-42.
- Arrondel, L. and Lafferère, A. (1996), *Succession Capitaliste et Succession Familiale*, mimeo.
- Arrondel, L., Masson, Alison and Pestieau P. (1997), 'Bequests and Inheritance: Empirical Issues and French Evidence', in Erreygers, G. and Vandeveldel, T. (eds), *Is Inheritance Justified?*, Berlin, Springer Verlag.
- Atkinson, Anthony B. (1980), 'Inheritance and the Distribution of Wealth', in Hughes, G.A. and Heal, Geoffrey M. (eds), *The Public Policy and the Tax System*, London, George Allen and Unwin, 36-66.
- Barro, Robert J. (1974), 'Are Government Bonds Net Wealth?', *82 Journal of Political Economy*, 1095-1117.
- Becker, Gary S. (1974), 'A Theory of Social Interactions', *82 Journal of Political Economy*, 1063-1093.
- Becker, Gary S. (1975), 'Human Capital and the Personal Distribution of Income: An Analytic Approach', Woytinsky Lecture 1967, *Human Capital*, New York, Columbia University Press, 94-144.
- Becker, Gary S. (1989), 'On the Economics of the Family: Reply to a Skeptic', *79 American Economic Review*, 514-518.
- Becker, Gary S. (1991), *A Treatise on the Family*, Cambridge, Harvard University Press.
- Becker, Gary S. (1993), 'The Economic Way of Looking at Behavior', *101 Journal of Political Economy*, 385-409.
- Becker, Gary S. and Tomes, Nigel (1979), 'An Equilibrium Theory of the Distribution of Income and Intergenerational Mobility', *87 Journal of Political Economy*, 1153-1189.
- Becker, Gary S. and Tomes, Nigel (1986), 'Human Capital and the Rise and Fall of Families', *4(2) Journal of Labor Economics*, 1-39.
- Bennett, S.K. (1990), *Economic and Non-Economic Factors Motivating Bequest Patterns*, mimeo.
- Bergstrom, T. C. (1996), 'Economics in a Family Way', *34 Journal of Economic Literature*, 1903-1934.

- Bernheim, B. Douglas (1991), 'How Strong are Bequest Motives? Evidence Based on Estimates of The Demand for Life Insurance and Annuities', **99** *Journal of Political Economy*, 899-927.
- Bernheim, B. Douglas and Bagwell, Kyle (1988), 'Is Everything Neutral?', **96** *Journal of Political Economy*, 308-338.
- Bernheim, B. Douglas, Schleifer, A. and Summers, Lawrence H. (1985), 'The Strategic Bequest Motive', **93** *Journal of Political Economy*, 1045-1076.
- Bevan, D.L. (1979), 'Inheritance and the Distribution of Wealth', **46** *Economica*, 1153-1189.
- Bevan, D.L. and Stiglitz, J.E. (1979), 'Intergenerational Transfers and Inequality', **1** *Greek Economic Journal*, 8-26.
- Blinder, Alan S. (1973), 'A Model of Inherited Wealth', **88** *Quarterly Journal of Economics*, 608-626.
- Blinder, Alan S. (1974), *Towards an Economic Theory of Income Distribution*, Cambridge, MA, MIT Press.
- Blinder, Alan S. (1976a), 'Intergenerational Transfers and Life Cycle Consumption', **66** *American Economic Review*, 87-93.
- Blinder, Alan S. (1976b), 'Inequality and Mobility in the Distribution of Wealth', **29** *Kyklos*, 607-638.
- Bracewell-Milnes, Barry (1989), *The Wealth of Giving: Every One in his Inheritance*, London, Institute of Economic Affairs.
- Brenner, Gabrielle A. (1985), 'Why did Inheritance Laws Change?', **5** *International Review of Law and Economics*, 91-106.
- Brenner, Reuven (1985), *Betting on Ideas*, Chicago, University of Chicago Press.
- Brinig, Margaret F. (1994), 'Finite Horizons: The American Family', **2** *International Journal of Children's Rights*, 293-315.
- Brinig, Margaret F. (1996), 'The Family Franchise, Elderly Parents and their Adult Siblings', **1996** *Utah Law Review*, 393-425.
- Brough, Wayne T. (1990), 'Liability Salvage - by Private Ordering', **19** *Journal of Legal Studies*, 95-111.
- Bruce, Neil and Waldman, Michael (1990), 'The Rotten Kid Theorem Meets the Samaritan's Dilemma', **105** *Quarterly Journal of Economics*, 1165-1182.
- Buchanan, James M. (1983), 'Rent Seeking, Noncompensated Transfers, and Laws of Succession', **26** *Journal of Law and Economics*, 71-85.
- Cabrillo, Francisco (1996), *Matrimonio, Familia y Economía* (Marriage, Family and Economics), Madrid, Minerva Ediciones.
- Chami, Ralph (1996), 'King Lear's Dilemma: Precommitment versus the Last Word', **52** *Economics Letters*, 171-176.
- Chami, Ralph and Fischer, Jeffrey (1996), 'Altruism, Matching and Nonmarket Insurance', **34** *Economic Inquiry*, 630-647.
- Cigno, Alessandro (1995), *Saving, Fertility and Social Security in the Presence of Self-Enforcing Intrafamily Deals*, mimeo.
- Cox, Donald (1987), 'Motives for Privates Transfers', **96** *Journal of Political Economy*, 508-546.
- Cox, Donald (1990), 'Intergenerational Transfers and Liquidity Constraints', **104** *Quarterly Journal of Economics*, 187-217.
- Cox, Donald and Stark, Oded (1994), 'Intergenerational Transfers and the Demonstration Effect',

mimeo.

- Cremer, H. and Pestieau P. (1993), 'Education for Attention: a Nash Bargaining Solution to the Bequest-as-Exchange Model', **48** *Public Finance*, 85-97.
- Cremer, H. and Pestieau P. (1996), 'Bequests as a Heir Discipline Device', **9** *Journal of Population Economics*, 405-414.
- Cremer, H., Kessler, Daniel and Pestieau P. (1991), 'Intergenerational Transfers within the Family', **58** *European Economic Review*, 359-375.
- Cyrus, Chu C.Y. (1991), 'Primogeniture', **99** *Journal of Political Economy*, 78-99.
- Davies, J.B. (1981), 'Uncertain Lifetime, Consumption and Dissaving in Retirement', **89** *Journal of Political Economy*, 561-577.
- Davies, J.B. (1982), 'The Relative Impact of Inheritance and Other Factors on Economic Inequality', **97** *Quarterly Journal of Economics*, 471-498.
- De Geest, Gerrit (1995), 'Contracting by Way of Non-Simultaneous Assent: An Economic Analysis of Irrevocable Offers, Clauses for the Benefit of a Third Party, Assignments and Testaments', in Bouckaert, Boudewijn and De Geest, Gerrit (eds), *Essays in Law and Economics II: Contract Law, Regulation, and Reflections on Law and Economics*, 1-27.
- Desai, M. and Shah, A. (1983), 'Bequest and Inheritance in Nuclear Families and Joint Families', **50** *Economica*, 193-202.
- Erreygers, G. (1997), 'Views on Inheritance in the History of Economic Thought', in Erreygers, G. and Vandevelde, T. (eds), *Is Inheritance Justified?*, Berlin, Springer Verlag.
- Erreygers, G. and Vandevelde, T. (1997), *Is Inheritance Justified?*, Berlin, Springer Verlag.
- Garcimartín Alférez and Francisco Javier (1995), 'El Régimen Normativo de las Transacciones Privadas Internacionales: una Aproximación Económica (The Regulation of International Private Transactions: an Economic Approach)', **2** *Revista Española de Derecho Internacional*, 99-111.
- Greene, Kenneth V. (1973), 'Inheritance Unjustified?', **16** *Journal of Law and Economics*, 417-419.
- Haslett, D. W. (1994), *Capitation with Morality*, Oxford, Clarendon Press.
- Hirsch, Adam J. and Wang, William K.S. (1992), 'A Qualitative Theory of the Dead Hand', **68** *Indiana Law Journal*, 1-58.
- Ireland, Thomas R. (1973), 'Inheritance Justified: A Comment', **16** *Journal of Law and Economics*, 421-422.
- Joulfaian, D. (1993), *The Distribution and the Division of Bequests in the U.S.: Evidence from the Collation Study*, mimeo.
- Koller, Roland H. II (1973), 'Inheritance Justified: A Comment', **16** *Journal of Law and Economics*, 423-424.
- Kotlikoff, L.J. and Spivak, Avia (1981), 'The Family as an Incomplete Annuities Market', **89** *Journal of Political Economy*, 372-391.
- Laitner, J. (1988), 'Bequests, Gifts and Social Security', **55** *Review of Economic Studies*, 275-299.
- Laitner, J. (1991), 'Modeling Marital Connections among Family Lines', **99** *Journal of Political Economy*, 1123-1141.
- Linbeck, A. and Weibull, Jürgen W. (1988), 'Altruism and Time Consistency: the Politics of Fait Accompli', **96** *Journal of Political Economy*, 1165-1182.
- Masson, Alison (1995), 'L'Héritage au Sein des Transfers entre Générations: Théorie, Constat, Perspective', in Attias-Donfut, Cl. (ed.), *La Solidarité entre Générations*, Paris, Nathan.

- Masson, Alison and Pestieau P. (1994), 'L'Héritage et l'Etat', in Pestieau P. (ed.), *Héritage et Transmission Intergénérationnelles*, Bruxelles, De Boeck Université, 15-44.
- Menchik, Paul (1980a), 'Primogeniture, Equal Sharing and the U.S. Distribution of Wealth', **94** *Quarterly Journal of Economics*, 299-316.
- Menchik, Paul (1980b), 'Effect of Material Inheritance on the Distribution of Wealth', in Smith, J.D. (ed.), *Modelling the Distribution and Intergenerational Transmission of Wealth*, Chicago, University of Chicago Press, 159-185.
- Menchik, Paul (1988), 'Unequal Estate Division: is it Altruism, Reverse Bequests, or Simply Noise?', in Kessler, D. and Masson, A. (eds), *Modelling the Accumulation and Distribution of Wealth*, Oxford, Oxford University Press, 105-116.
- Modigliani, Franco (1986), 'Life Cycle, Individual Thrift, and the Wealth of Nations', **76** *American Economic Review*, 297-313.
- Modigliani, Franco and Brumberg, R. (1954), 'Utility Analysis and the Consumption Function: an Interpretation of Cross-Section Data', in Kurihana, K.K. (ed.), *Post-Keynesian Economics*, New York, Rutgers University Press, 388-436.
- Moore, B.J. (1979), 'Life Cycle Saving and Bequest Behavior', **1** *Journal of Post Keynesian Economics*, 78-99.
- Ott, Claus (1995), 'Comment on Contracting by Way on Non-Simultaneous Assent in the German Civil Code', in Bouckaert, Boudewijn and De Geest, Gerrit (eds), *Essays in Law and Economics*, 29-33.
- Posner Richard A. (1992), *Economic Analysis of Law* (4th edn), Boston, Little Brown.
- Posner, Eric A. (1997), 'Altruism, Trust, and Status in the Law of Gifts and Gratuitous Promises', *Wisconsin Law Review*, forthcoming.
- Pryor, F.L. (1973), 'Simulation of the Impact of Social Economic Institutions on the Size Distribution of Income and Wealth', **63** *American Economic Review*, 50-72.
- Ricardo, D. (1817), *Principles of Political Economy and Taxation*, London, Murray.
- Richter, Wolfram F. (1992), *Bequeathing Like a Principal*, University of Dortmund, mimeo.
- Rosental, P.A. (1991), 'Pratiques Successorales et Fécondité: l'Effet du Code Civil', **100** *Economie et Prévision*, 231-238.
- Schäfer, Hans-Bernd and Struck, Gerhard (1983), 'Schlammabseitung auf der Bundesstrasse. Geschäftsführung ohne Auftrag, Deliktsrecht, negatorische Haftung. Ökonomische Analyse des Rechts (The Case of the Mud Removal at the Federal Highway)', in Walz, W. Rainer and Rascher-Friesenhausen, Hein (eds), *Sozialwissenschaften im Zivilrecht: Fälle und Lösungen in Ausbildung und Prüfung*, 119-132.
- Shammas, Carole, Salmon, Marylynn and Dahlin, Michel (1987), *Inheritance in America from Colonial Times to the Present*, New Brunswick, Rutgers University Press.
- Stake, Jeffrey E. (1990), 'Darwin, Donations, and the Illusion of Dead Hand Control', **64** *Tulane Law Review*, 705-781.
- Stark, Oded (1995), *Altruism and Beyond*, Cambridge, Cambridge University Press.
- Stiglitz, J.E. (1969), 'Distribution of Income and Wealth Among Individuals', **37** *Econometrica*, 382-397.
- Tomes, Nigel (1981), 'The Family, Inheritance and the Intergenerational Transmission of Inequality', **89** *Journal of Political Economy*, 928-958.
- Tomes, Nigel (1982), 'On the Intergenerational Savings Function', **34** *Oxford Economic Papers*, 108-134.
- Tomes, Nigel (1988a), 'Inheritance and Inequality within the Family: Equal Division among Unequals,

- or Do the Poor Get More?', in Kessler, D. and Masson, A. (eds), *Modelling the Accumulation and Distribution of Wealth*, Oxford, Clarendon Press, 79-104.
- Tomes, Nigel (1988b), 'The Intergenerational Transmission of Wealth and the Rise and Fall of Families', in Kessler, D. and Masson, A. (eds), *Modelling the Accumulation and Distribution of Wealth*, Oxford, Clarendon Press, 147-165.
- Tullock, Gordon (1971), 'Inheritance Justified', **14** *Journal of Law and Economics*, 465-474.
- Tullock, Gordon (1973), 'Inheritance Rejustified', **16** *Journal of Law and Economics*, 425-428.
- Van de Gaer, D. (1997), 'Remarks on Inheritance and Marriage', KUL, unpublished manuscript.
- Van de Gaer, D. and Crisologo, L. (1999), 'Population Growth and Customary Law on Land: The Case of Cordillera Villages in the Philippines', *Economic Development and Cultural Change*, Forthcoming.
- Wilhem, M.O. (1996), 'Bequest Behavior and the Effect of Heirs' Earnings: Testing the Altruistic Model of Bequests', **86** *American Economic Review*, 874-892.