

## Chapter 2

# Economic and Ideational Theories of Marriage and Fertility Behaviour

### 2.1 Introduction

The purpose of this chapter is to reconsider marriage and fertility behaviour in developed countries from a viewpoint of social action theory. A number of decades ago, Duesenbery (1960) stated, “Economics is all about how people make choices. Sociology is all about why they don’t have any choices to make”. This remark aptly describes a difference in the analytical framework of fertility behaviour between the two academic disciplines. On the one hand, an economist sees demographic behaviour as the process of arranging material conditions to maximize one’s utility (satisfaction). On the other hand, a sociologist focuses on values and norms that encourage or discourage people to take a specific action. The former’s scholarly concern lies in optimizing instrumental resources to attain a fixed goal (preference); the latter is interested in the beliefs and regulations that provide the orientation of an individual action.

A similar contrast is seen in interpretations of demographic phenomena after the late 1960s. As is well known, developed countries experienced a marked change in their patterns of partnership and fertility following the “baby boom” years, which ran from the early 1950s through the early 1960s. After the end of baby boom, the number of cohabiting couples increased substantially in these countries while marriage fell out of favour. During this same period, the level of fertility declined while the timing of childbirth was postponed. These changes from the second half of the 1960s onwards are often generically termed the “Second Demographic Transition (SDT)” (Lesthaeghe 1983, 1995; van de Kaa 1987, 1994), although a unanimous consensus has not necessary been built on its conceptual appropriateness (Bernhardt 2004; Caldwell 2006). For instance, Cliquet (1991) rejecting the notion of a “Second Demographic Transition”, contends that demographic changes after the baby boom can be regarded as part of a process that has been going on over the past several decades. In a similar vein, Coleman (2004)

claims that these recent demographic phenomena do not fall into the category of a demographic transition and may be more accurately regarded as a preference transition in lifestyle.

Putting aside the conceptual validity of the SDT, no one denies that entering a married status and bearing children are human actions conducted within a society. Thus, the patterns of marriage and fertility in developed countries need to be accounted for fundamentally from a viewpoint of social action (Morgan and Taylor 2006), although some interpretations by mechanical and formal demography have been proposed so far. Taking this point into account, foremost attention should be paid to two contrasting theoretical paths, namely, the economic and ideational theories. Generally speaking, the economic theory holds that, given a fixed preference, objective and material resources such as incomes and employment opportunities determine the demographic patterns and trends of developed countries (McNicoll 1992). The ideational theory, in contrast, places more importance on subjective factors such as human ideas and attitudes towards family and lifestyle than on material conditions as the determinants of demographic behaviour.

It can be easily recognized that these two theories fundamentally differ in their models of human behaviour. More specifically, economic theory assumes that, since human beings are of a materialistic nature, their behaviour hinges on their physical situation. By contrast, ideational theory holds that human beings are oriented towards their values and beliefs, which motivate their actions in specific directions. One must bear in mind, however, that every academic discipline in the social sciences espouses its own model of human behaviour. Admittedly, the framework of a model in the social sciences can eliminate peripheral and residual elements and provide useful guidance for the analysis and better understanding of human behaviour and conduct. Thus, a behavioural model is a useful tool in the interpretation of complex phenomena as long as it is constructed not to replicate human nature, but to utilize as an abstract entity (Simion 1985). At the same time, however, the model must contribute towards getting a precise grasp on reality, and a human subject assumed by the model should be not imaginary creature, but an actual human being, tangibly connected to the complexities of the real world. In other words, the model of human action needs to reflect the way people actually behave in daily life (de Bruijn 1999). These features of a behavioural model necessitate the raising of questions concerning the methodology and epistemology behind the model itself. The model must reflect human behaviour and conduct in the real world in a down-to-earth and recognizable manner. At the same time, however, the model needs be constructed succinctly to delineate the complexities of reality as simply, clearly, and accurately as possible. Thus, a balance between what is real and what is abstract is important for constructing a theoretical model of human behaviour. Moreover, the theoretical model should be evaluated on its relevance to reality and be elaborated upon to enhance its explanatory power.

As already mentioned, economic and ideational theories hold contrasting models of human behaviour in the investigation of marriage and fertility patterns. We should, however, not forget that both disciplines deal with the same research objects. Although the models of these two theories stand at a distinct remove from

each other, their conceptual framework of human action is created from the identical social phenomena. Hence, this distance is undoubtedly derived from the fact that the models are constructed in contrasting methods of abstracting reality. At the same time, however, it should also be recognized here that the juxtaposition of many differing theoretical models does not serve in obtaining a clear understanding of the mechanism of marriage and fertility. Rather, since behavioural models are meant to be used as tools for grasping the social phenomena of our world, they should be reconstructed in such a way as to give us a more insightful and inclusive understanding of social reality.

Taking these points into consideration, in this chapter, we will attempt to reconsider a theory of marriage and fertility behaviour from a viewpoint of social action theory. In the following part of the chapter, we will first provide a review on the theory of the SDT. Next, we will move on to discuss the differences between ideational and economic approaches to the explanation of marriage and fertility behaviour. Subsequently, the two behavioural models will be discussed from a viewpoint of rational choice theory, followed by a discussion of the influence of institutional contexts on marriage and fertility behaviour. The concluding emphasis of this chapter will be placed on the importance of empirical studies of the two theories.

## 2.2 Phenomenological Aspects of the Second Demographic Transition

In order to characterize demographic changes in Western Europe after the baby boom, the concept of the SDT was proposed for the first time by Dirk van de Kaa and Ron Lesthaeghe in a Dutch sociology journal in 1986 (van de Kaa 1996, 2003; Lesthaeghe 2010, 2014). This was, however, not the first attempt to formulate a demographic change from a long historical perspective (Kreager 2015). Similar theories had been put forward before its conceptualization. In fact, the term, “demographic transition”, which may sometimes be called “the first demographic transition” (FDT), had already been used by Davis (1945) and Notestein (1953), while Thompson (1929) also characterized the relation between a decline in fertility and mortality in a similar fashion.

Nevertheless, the SDT differs in concept from the first transition on two points. Firstly, the FDT is a framework describing a process of moving from one state of equilibrium to another. The theory assumes that a high level of fertility was formerly balanced with that of mortality. However, due to the modernization of a society, once the death rate starts to reduce, the fertility rate also declines in response to the falling mortality rate. As a result, a demographic state of high fertility and mortality shifts to one of low fertility and mortality. In short, the classical theory of the demographic transition indicates a change of demographic regimes in a homeostatic situation, in which population size stays in equilibrium with almost the same number of births and deaths (Wilson 2013).

In contrast, the SDT does not necessarily assume stability in a demographic regime (van de Kaa 1987, 1994; Lesthaeghe 1995, 2001; Lesthaeghe and Willems 1999). In this theory, no assumption is made that a human population always stabilizes with the replacement level of fertility and low mortality after transiting from high fertility and high mortality. As for below-replacement fertility, which may lead to continuous population decline, this is understood in the framework of the SDT to be a hallmark of the demographic regime of present-day affluent societies (McNicol 2012). Indeed, the total period fertility rate (TPFR) had plunged to the below-replacement level in Europe by the 1980s (Coleman 1996). As it is assumed in the orthodox demographic transition that the number of births and deaths would sooner or later reach equilibrium, the emergent of below-replacement fertility which does not bring that equilibrium was seen as an unexpected and surprising demographic phenomenon (Demeny 1997). This novel situation attracted research interest and much ink has been spilt in describing the features of fertility patterns. For example, “lowest-low fertility” was coined to describe the extreme scarcity of newborn babies in Mediterranean countries (Kohler et al. 2002). In addition, it was pointed out that the postponement of childbirth and recuperation of fertility are the salient features of European reproductive patterns, although there is very little agreement how far recuperation effects will increase the level of fertility (Billari et al. 2006; Lesthaeghe and Permyer 2014; Lesthaeghe and Willems 1999).

Secondly and more importantly, the SDT includes more far-reaching changes than the first transition in patterns of partnership and family formation after the 1960s. Indeed, patterns of partnership have, albeit with regional variations in speed and extent, changed in tandem with changes in reproductive patterns in European countries. For instance, the number of births out of wedlock has risen in Western and Northern Europe (Kiernan 1996, 1999b). The percentage of extra-marital births over all live births, which stood at less than 10 % in 1970, reached around 50 % in Denmark, France, Norway, the Netherlands and the United Kingdom in 2011, whereas the crude divorce rate, which is affected by the proportion of aged and children’s populations, has risen from approximately 1.0 per thousand to 2.0 per thousand in the same period (Eurostat Database). Likewise, cohabitation has also been gaining in popularity as either an alternative or a prelude to marriage in North-western Europe (Kiernan 1999a, 2001, 2004; Ní Bhrolcháin and Beaujouan 2013). Similarly, Latin American countries such as Argentina, Brazil and Chile have also increased the number of cohabitated couples since the 1990s (Esteve et al. 2012). Furthermore, the timing of leaving a natal home has been delayed, reaching nearly age 30 in Southern Europe (Iacovou and Parisi 2009).

These phenomena naturally allow us to move out from the narrow world of the mortality–fertility relationship in Demography. In short, the central focus of the FDT is a shift from one state of equilibrium between mortality and fertility to another state. Even if marriage behaviour is analysed in the FDT, the primary interest lies in its influence on marital fertility. This is because most births occurred within wedlock and nuptiality was tightly linked to fertility. Hence, the FDT does not explicitly deal with transformations in partnership, such as

cohabitation and divorce. In this regard, it seems better to view the SDT as not purely demographic but inclusive of changes of partnership and family formation (Coleman 2004). Indeed, van de Kaa (2003) puts forward to a list of fifteen sequential stages observed through the process of the SDT. This list includes changes in reproductive patterns such as sub-replacement fertility, delayed child-bearing and premarital birth. At the same time, however, partnership changes seen in phenomena such as the rising divorce rate and the increasing prevalence of cohabitation and the postponement of marriage are referred to as features of the SDT.

These sequential indicators were proposed in order to clarify and universalize the theory of the SDT. With the benefit of hindsight, however, it cannot be denied that they have made the concept of the SDT elusive and ambiguous. For simplicity, let us consider the following cases. Country A displays the last five features in the van de Kaa list without showing evidence of the first five changes, while Country B exhibits only five demographic phenomena from the middle of this same list. In these cases, it is very difficult to judge whether the two countries are undergoing the SDT. In other words, as the descriptive definition of the SDT becomes more strict and rigid, exceptional and irregular cases become more intractable to consider. In fact, looking at only European countries, the case is more complicated than the theory of the SDT expected. For instance, the total period fertility rate (TPFR) shows a salient diverse trend in European countries. Due to the fact that a decline in the TPFR started in the mid-1970s and spread over Europe until the end of the 1990s, a TPFR of below 1.5 (so-called “very low fertility”) was observed in 25 out of 39 European countries in 2002. Furthermore, the TPFR of 16 countries stood below 1.3, the so-called lowest-low fertility, among 39 European countries with populations of more than 100,000 in the same year (Kohler et al. 2002). These countries have, however, displayed a diverse trajectory of fertility patterns since the first decade of the twenty-first century (Frejka and Sobotka 2008; Neyer 2013; Sobotka 2008a, b). Western and Northern European countries (excluding German-speaking countries) have the highest low fertility whose TPFR is equal to or more than 1.85. Indeed, the TPFR bounced back to over 1.8 in Belgium, Denmark, Finland, Sweden and the UK in 2011, while it reached even 2.0 in France. In contrast, Eastern European countries such as Hungary and Poland, and Southern European countries such as Italy and Spain still remained at a very low fertility, with TPFRs staying around 1.5 in 2011. Furthermore, the TPFR level fluctuated at around 1.3 among East Asian developed countries such as Japan, South Korea, Singapore and Taiwan (Goldstein et al. 2009). These regional variations on fertility patterns sketch scenarios other than those expected by the SDT. The same holds true in patterns of living arrangements and partnership formation. An increase in the number of cohabitations and extra-marital births is regarded as one of the important signals which indicate that a country has entered the stage of the SDT. Developed countries, however, show regional variations on these demographic indicators. For example, although Romania and the Russian Federation reached a very low fertility, cohabitation did not gain as much in popularity in these two countries as in North-western Europe (Potârca et al. 2013). In particular,

Romanians, like Italians, tend to prefer the postponement or abandonment of legal marriage to cohabitation even in their young birth cohorts. Moreover, the number of extra-marital births has increased in Australia (Carmichael 2014), although the number still remains extremely small in Japan (for details, see Chaps. 3 and 4). Partnership formation and parenthood pattern tend to change simultaneously in Western and Northern Europe, whereas the salient postponement of marriage and childbearing and a mild increase in cohabitation, as a whole, occur in East Asian with a patriarchal family system and Southern Europe. In contrast, Latin American countries show a drastic rise in the number of cohabitations and a modest delay in the timing of childbearing (Esteve et al. 2012; Lesthaeghe 2014).

Apart from the detailed description of geographical variations in partnership and childbearing patterns, it is certain that not only fertility but also marriage patterns differ considerably between developed countries. Undoubtedly, this regional variation calls the universality and pervasiveness of the SDT into question. More specifically, the notion of the SDT has been used to attempt to describe universal features of demographic changes in developed countries after the 1960s, but yet this grand narrative has not yet been developed and elaborated upon to the point where it can be granted universal consent. In short, the patterns of partnership, living arrangements and family building show, for the time being, a great geographical diversity. Hence, we can argue that, on the descriptive side, the theory of the SDT is not so sophisticated as to grasp demographic reality in developed countries accurately and sufficiently.

## 2.3 Economic Theories of Marriage and Fertility Behaviour

As discussed in the proceeding section, the theory of the SDT lacks sufficient breadth of scope and content to be employed as a general description of demographic phenomena in developed countries after the 1960s. As exemplified by an increase in the number of consensual unions, postponed marriages and extra-marital births, partnership and childbearing patterns have shown more diverse developments in these countries than anticipated in the theory. This evidence naturally challenges the validity of the concept as a comprehensive description of demographic change in industrialized society. At the same time, it should not be, however, overlooked that the theory of the SDT also includes an explanatory framework for demographic behaviour in developed countries. More specifically, this concept aims to put forward a theoretical alternative to Richard Easterlin's and Gery Becker's economic theories regarding marriage and fertility (Lesthaeghe 2010). We will provide a detailed discussion on this point, but before moving on to that, it would be helpful to take a brief look at the economic theories on marriage and fertility behaviour. Since a considerable number of studies on marriage and childbearing behaviour from an economic point of view have been carried out hitherto, it is outside the scope of this chapter to give an exhaustive review of

previous research on the economic theory of marriage and family. Rather, in the following discussion, we will concentrate on the theoretical features of economic analysis on marriage and fertility.

Received wisdom has it that the economic theory of marriage and fertility is classified into two groups: New Home Economics theory and Easterlin's theory. The New Home Economics theory on fertility behaviour was initially articulated by Becker (1960) and has been developed mainly by his colleagues (Becker 1976, 1986, 1991, 1996; Becker and Barro 1988; Becker and Lewis 1973; Butz and Ward 1979; Folbre 1996; Rosenzweig and Stark 1997; Schultz 1974; Werding 2014; Willis 1973). Although this theory has been formulated by several authors in various terms, the heart of its theoretical framework lies in its application of the Hicks–Allen consumption theory to fertility behaviour (Androka 1978). Thus, this theory presumes that human fertility behaviour can be equated to human behaviour in the consumption of market goods and services. More specifically, the New Home Economics theory is formulated on the basis of two assumptions. The first assumption is that, in an industrialized society, children are no longer of any productive or economic utility to their parents and can be regarded purely as consumption goods bringing psychological satisfaction to their parents. As Leibenstein (1974, 1975, 1976, 1981) points out, children may have several sorts of utility at a less developed stage of society. For instance, after entering the labour force, children may provide help either on the family's farm or workshop or earn an income to add to the common household fund. In addition, grown-up children may provide subsistence for their aged parents. However, these two forms of utility rarely exist in highly developed society (Caldwell 1982). The theory's second basic assumption holds that a household (or a couple) spends its time and money and consumes goods and services, in order to maximize its utility (satisfaction) in a fixed and stable preference. As mentioned by orthodox modernization theories, one of the most distinctive features of social development from an agrarian to an industrialized society is the functional differentiation of family and household (Burgess and Lock 1945; Ogburn and Nimkoff 1955). In concrete terms, although the family was a unit with many social functions such as protection, education, production and consumption in an agrarian society, it performs very few functions such as children's socialization and the stabilization of adults' personality in an industrialized society (Levy 1966; Moore 1974; Parsons and Bales 1955; Smelser 1959). In view of that, the activities of contemporary families and households are, to a considerable degree, directed towards gaining satisfaction from consuming goods and services. In this sense, the degree to which goods and services bring satisfaction when they are consumed plays an important role in a couple's (or a household's) behaviour.

Based on these assumptions, the New Home Economics theory holds that, under the constraint of its monetary budget, a couple consumes goods in such a way as to maximize their utility in a fixed preference ordering.<sup>1</sup> More concretely,

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<sup>1</sup>Becker (1996) attempts to propose a utility function which allows preference to be more dynamic and changeable. Yet, the formation of human preference is, in reality, more complicated than Becker formalizes (for details, see Henrich et al. 2004).

the theory assumes that a rise in household income will, *ceteris paribus*, increase the number of children. This relation easily finds its analogy in the consumption theory in which the level of household income determines the consumption level of market goods and services. At the same time, however, the theory recognizes that a higher income does not always lead to an increase in the demand for children. This may occur when the “substitute effect” outweighs the “income effect”. In concrete terms, Becker and Lewis (1973) formulate this phenomenon as the interaction between the quantity and quality of children. In consumption behaviour, it is likely that, instead of increasing the demand for inferior goods, a rise in income levels will create an increase in the demand for superior goods. In the case of childbearing behaviour, parents with a higher income may not want more children. Instead, they may spend more money per child in order to enhance the quality of their children—just as an increase in income may allow consumers to shift from an economy car to a luxury car. Due to this switch from quantity to quality, a rise in income does not always lead to an increase in the number of children a couple have.

Furthermore, in the New Home Economics theory, the opportunity cost of bearing and rearing children also plays a major role in fertility behavior (Butz and Ward 1979; Mincer 1963). More specifically, having children, even when they are regarded as consumer goods, necessitates a great deal of time being spent on caring for them. Bearing a child and caring for an infant are, in most cases, highly time-intensive activities on the part of mother (assuming a traditional gender role). In particular, since working and childbearing are usually mutually exclusive alternatives for a substantial length of time when women choose to have children, mothers must often give up their gainful occupation during this period. As a result, women are forced to abandon any earnings that could have been obtained in the absence of a child. It therefore follows that a rise in female income, which causes a rise in her opportunity costs, increases the cost of having children relative to other goods and services. This rise will reduce the number of children and result in a fertility decline.

As is the case of fertility, marriage is also regarded as an economic activity in the New Home Economics theory. More specifically, partnership behaviour is delineated through the application of “the principle of comparative advantage” as proposed by the British political economist David Ricardo (1772–1823) (Becker 1973, 1974, 1976; Cigno 1991; Ermisch 2003; Freiden 1974; Oppenheimer 1997; Santos 1975), proceeding upon two basic suppositions. The first of these supposes that men and women allocate their own time to market activity and domestic activity. When engaged in market activity, people work and earn money, whereas people engaged in domestic activity produce “household commodities” such as meals, good health, washed clothing and children. The consumption of commodities occurs in domestic activity in order to maximize the household’s own utility. The second supposition assumes a difference in level between a given man or woman’s productivity in market or domestic activities; these differing production capacities in these two different spheres are used as a trade-off in couple formation. Totalizing these assumptions, where men earn a higher wage in the labour

market than women, it is assumed that men's efficiency in market activity is relatively superior to that of women. Likewise, when women perform domestic work more efficiently than men, the level of productivity in domestic work is assumed to be higher for women than for men. Based on these two suppositions, Becker and his colleagues regard marriage as a trading process between a man and woman for the maximization of their mutual utility. If, after marriage, one of the partners with a comparative advantage in market production specializes in market work, and the other with a comparative advantage in household production devotes herself or himself to domestic work, then their total utility will become greater and they will be better off by being married than by remaining single. As a result, they will enter into marriage. Conversely, single men and women will not marry and exchange their products with each other if the likely results of their trade-off through marriage are negative with no gain achieved; that is, if each partner perceives that he or she will be worse off by being married than by remaining single. In short, men and women will marry only if it increases their utility. Otherwise, they will remain single. Apparently, this may be regarded as a precise application of the Ricardian principle of comparative advantage.

Easterlin's theory, the latter of the two aforementioned economic theories, also explains marriage and fertility behaviour from a material point of view. According to this theory, relative income determines marriage and childbearing patterns (Easterlin 1961, 1973, 1976, 1978, 1987, 2004; Easterlin et al. 1980; Oppenheimer 1988). To be specific, children who grow to maturity in a cohort with a high standard of living maintain similarly high material expectations as young adults, whereas those who grow up in a cohort with a low standard of living retain low material expectations. Hence, when the present earning potential of young adults is high relative to their material aspirations, their relative economic status is better. In contrast, when the current potential of young adults is low relative to their aspirations, their relative economic status is worse. This status is an index of relative affluence which is defined as a ratio between the earning potential of young people and the level of their material aspirations shaped by their natal household. In many cases, the job opportunities or wage rates of young adults in the labour market are used as the numerator of this ratio, while its denominator is measured by their living standards as children in their parental home.

Based on these assumptions, Easterlin's theory explains demographic behaviour by utilizing the relative economic status between generations. When the relative economic status of young adults is better, they will feel less economic pressure, marry earlier and have more children. In contrast, if their relative economic status is worse, they will feel increasing economic stress, marry later and have fewer children. In short, Easterlin's theory holds that relative economic status, which is formulated by economic and material conditions, determines the patterns of marriage and childbearing.

At first glance, the New Home Economics theory and Easterlin's theory formulate demographic behaviour differently, but they have a fundamental theoretical character in common in that both theories postulate that people's decisions on getting married and having children are made from an economic and materialistic

point of view. If entering a married status is economically profitable to both parties, they choose to marry. Likewise, if economic circumstances such as incomes and opportunity costs are favourable for having children, people will become parents. Moreover, when relative economic status is relatively better, young adults get married and have children. Examining the similar characteristics of these two theories, we can clearly see that both the New Home Economics and Easterlin's theories pay almost no attention to the subjective and psychological aspects entailing partnership and parenthood in one's life. The two theories' absence of focus on these areas contrasts strikingly with the attention they are given in the ideational theory. As we will argue in the following section, the ideational theory holds that marriage and fertility behaviour are oriented towards beliefs and values. In the two economic theories discussed, however, such subjective elements are beyond consideration. All in all, both New Home Economics theory and Easterlin's theory insist that changes in the patterns of partnership and childbearing are ultimately attributable to economic conditions in developed countries.

## 2.4 Second Demographic Transition as Ideational Theory

As discussed above, in the economic theories, objective and material factors play a key role in explaining marriage and reproductive behaviour. In contrast, these demographic behaviours are primarily explained from the viewpoint of ideational and attitudinal factors in the notion of the SDT. Accordingly, instead of seeing marriage and fertility patterns as a consequence of economic conditions such as cost and income, a transformation in partnership and parenthood in developed countries is related to subjective and motivational factors such as values and attitudes (Aassve et al. 2013; Jayakody et al. 2008; Lesthaeghe 1983, 2002; Lesthaeghe and Surkyn 1988; van de Kaa 2001). Due to this characteristic, this explanation is called the ideational theory.

In demographic literature, the importance of ideational or attitudinal factors in marriage and fertility behaviour has never been ignored. For instance, Notestein (1953) already refers to the relation between demographic patterns and the change of social norms and values associated with the process of modernization. Similarly, Hawthorn (1970) emphasizes the importance of subjective factors as determinants of fertility. Moreover, it is also maintained that the process of family formation are not entirely dominated by economic cost-benefit calculations (Murphy 1992; Pollak and Watkins 1993). For instance, based on the comparative analyses of the demographic data obtained from the World Fertility Survey, Cleland and Wilson (1987) find that a fertility decline in less developed countries was more closely associated with parents' cultural factors, such as their new ideas on children, rather than with economic factors such as men's real wages and women's employment. Moreover, Blake (1968) provides a harsh criticism of the notion of children as consumer goods. Indeed, it is pointed out that, even in a contemporary society, children have more functions than giving pleasure (Friedman et al. 1999;

Nauck 2007, 2014; Trommsdorff and Nauck 2005). For instance, having children may consolidate the feeling of solidarity among family members. Such inherent values challenge the notion of children as consumer goods. The historical evidence also suggests that subjective advantages must outweigh disadvantages for a new form of demographic behaviour to emerge (Coale and Watkins 1986). For example, in the First Demographic Transition (FDT) in Europe, which occurred towards the end of the nineteenth century, economic factors alone do not serve to explain the movements of fertility to a satisfactory degree (Lesthaeghe and Wilson 1986). Rather, the findings of the European Fertility Project, which analysed the process of the FDT in Europe, show that the decline in fertility occurred under strikingly diverse socio-economic conditions, and cultural settings had a strong influence on the onset and spread of fertility decline (Coale and Watkins 1986; Knodel and van de Walle 1979; Watkins 1989). For instance, in the case of Belgium, two different linguistic regions under similar economic conditions—i.e., French-speaking Wallonia and Flemish-speaking Flanders—underwent different movements of fertility in the course of the transition (Lesthaeghe 1977), although the European Fertility Project was not designed to examine the effect of culture on reproductive behaviour precisely (Alther 1992). Furthermore, studies of Britain and Germany suggest that variables indicating the level of secularization played an important role in the decline of fertility (Knodel 1974; Teitelbaum 1984). These studies, albeit in their own terminology, reveal in common that subjective and psychological factors play a crucial role in demographic behaviour. Yet, it is since the advocacy of the SDT by Dirk van de Kaa and Ron Lesthaeghe that ideational and attitudinal factors have attracted greater attention in the explanation of partnership and childbearing patterns in developed countries after the 1960s.

Features in the values and attitudes affecting marriage and fertility patterns find interpretive expression in a variety of terms. Examples include the “spread of secular individualism” (Lesthaeghe 1983, 1992, 1995; Lesthaeghe and Meekers 1986; Lesthaeghe and Surkyn 1988), the “advent of adult (or couple)-oriented society” (Ariès 1980), the “increase of progressiveness” (van de Kaa 1980, 1987) or a “move from fundamentalism to pragmatism” (Simons 1982, 1986, 1999). However, these features can be summarized into two points. The first point is that a strong commitment to individualism has manifested itself in developed society, kindling a preoccupation with the pursuit of own goals or the aspiration of self-fulfilment in a social sphere rather than in a domestic sphere. As argued by Maslow (1970), human desires and needs evolve hand in hand with an increase in the level of affluence and security in society. In an earlier stage of economic development, the desire to satisfy material needs (“lower-order needs”) have the highest value, because sustenance for existence is relatively scarce. Yet, as a society becomes affluent, the individual priority of needs shifts to personal self-fulfilment (“higher-order needs”), for people do not have to worry about the scarcity of sustenance (Moors and Vermunt 2007). Furthermore, this change has an impact on the pattern of human behaviour in various ways (Inglehart 1977, 1990; Inglehart and Baker 2000; Inglehart and Welzel 2005). As for partnership and family formations, as more weight is placed on individual self-fulfilment within the social sphere,

people prefer to pursue their own goals rather than entering into married status or becoming parents (Buchmann 1989; Preston 1986). In short, the ideational theory regards this self-oriented and goal-pursuing attitude as one of the driving forces behind the transformation of partnership and fertility patterns in developed countries.

The second point is that conventional values regulating individual behaviour have weakened, thereby allowing more diverse lifestyles to be accepted. As is argued by by Anthony Wrigley (1978), since major aspects of preindustrial human behaviour were greatly regulated by social norms and institutional control, an individual's family-building process was under the strong influence of so-called traditional values. In other words, individual demographic behaviour was dominated by the "collective consciousness" of a human group (Durkheim 1995). This strong influence was, as a whole, suited to a less developed society where the availability of limited socio-economic resources was threatened by behaviour that deviated from social norms, consequently putting the population's existence at risk (Inglehart 1990; Wrigley 1978). Hence, individual demographic behaviour had to conform to conventional values and customs. In other words, the placement of tight controls on demographic behaviour made it possible for a band of human beings to allocate its relatively scarce resources in an optimal way, securing its continuing existence. Yet, thanks to a high productive capability and material security, demographic behaviour no longer needs to be regulated by traditional norms and values. Consequently, a more tolerant attitude to various types of demographic behaviour is allowed to develop. To put it another way, the regulation mechanism which was upheld by conventional customs and norms tends to give way to the principle of individual free choice in an affluent society and the development of a consciousness that accepts pluralism and diversity. As a result of this change, diverse demographic behaviour such as cohabitation, same-sex marriage and voluntary childlessness, which were rarely seen in the past, are being met with increasing tolerance and acceptance in contemporary society (Lesthaeghe and Meekers 1986; van de Kaa 1987).

Although there is room for further investigation regarding the extent to which these attitudinal changes can account for actual patterns of marriage and fertility, the theoretical framework maintained by the ideational theory is worth noting, for human action is directed by beliefs and values. Looking from the sociological theory of action, human behaviour is guided by the meanings and interpretations ascribed to a person's actions. Specific actions a person takes, at the same time, give meanings and reasons for everyday life. This discursive process can be regarded as a necessary element in the production and reproduction of our conduct (Elster 1986; Garfinkel 1984; Giddens 1979, 1993; Schutz 1943, 1967, 1970). In short, the interpretation of one's actions is affected by the beliefs and values which the actor himself or herself holds, and one's choice of action is made through a process of self-interpretation. Moreover, expressed in terms such as "liquid modernity" and "reflective modernity" (Bauman 2000; Beck et al. 1994; Buchmann 1989; Giddens 1990; Luhmann 1998), self-interpretation of an individual's own behaviour has become more significant than ever in contemporary society. In

other words, meanings and accountability in choosing an action become especially important in the process of partnership formation and family building in a contemporary society where the grip of more conventional and institutional elements of family life have weakened (Beck and Beck-Gernsheim 1995; Beck-Gernsheim 2002; Cherlin 2006). Hence, there is no reason to deny that ideational and preferential factors play a crucial role in recent demographic phenomena (Hakim 2003a, b). In fact, it is found that subjective benefits play a key role both in the formation of partnership and in the transition to parenthood (Bernhardt and Goldscheider 2006; Liefbroer 2005; Sobotka 2008a, b; Thornton et al. 2007). Thus, the theoretical framework proposed by the SDT may have enough potentiality for explaining the processes of marriage and fertility behaviour in our affluent world. At the same time, from a viewpoint of scholarly research, we can argue that more significance should be placed on theoretical rather than descriptive aspects in the concept of the SDT.

## 2.5 Demographic Behaviour as a Purposive Action

As has been already discussed, the economic and the ideational theories provide diverging explanations of marriage and fertility behaviour. The former theory looks at marriage and childbirth from a material and objective point of view; the latter theory examines them through values and attitudes. This contrast is derived from the factors which each theory employs in its explanations, but it is, at the same time, related to the distinct model of human behaviour inherent in each theory. As discussed in a previous section, the characteristics of a given human behavioural model hinge considerably on the way in which reality is abstracted in them (Lindenberg 1992). In other words, the economic and ideational theories are constructed around disparate methodological and epistemological frameworks for marriage and fertility behaviour. Thus, in order to understand the differences between the two theories distinctly, it is necessary to clarify the methodological and epistemological postulates of their behavioural models. We will, in the present section, compare and contrast the behavioural models of these two theories.

When it comes down to the economic theory, its model of a human action is based on two presumptions. First of all, an actor's preferences are stable and exogenously given in the economic model. Indeed, Stigler and Becker (1977) clearly maintain that neoclassical economics should treat human preferences as fixed and exogenous. Accordingly, the extent to which marriage and children bring utility (satisfaction) to people is pre-emptively and transcendently determined. Second, in the economic theory the purpose of an action is to optimally allocate limited social resources such as wages and time in order to maximize utility with available means. In other words, a human action is taken in order to achieve the utmost satisfaction at the minimum cost which is convertible to monetary terms. Given these premises, it follows that marriage and childbearing occur if they bring more benefits than costs (Blossfeld and Prein 1998). In short, getting married and having

children can be regarded as a result of utility-maximizing behaviour with the optimal investment of restricted social resources such as money, time and human capital. Hence, a cost–benefit calculation plays a central role in deciding whether to marry and to have children. Furthermore, if different demographic patterns occur, their causes will be attributable to changes in costs and benefits that marriage and children have brought. For instance, an increase in wages, human capital and opportunity cost may raise a relative cost entailed by entering married status and having children, leading to delayed marriage and fertility decline. This is the behavioural model of the human being according to the economic theory; this is the so-called *homo oeconomicus*.

By contrast, the ideational theory postulates a preference-centred heuristic model of human behaviour (Lindenberg 1991). In other words, human actions are, in this model, directed and motivated by the beliefs and values an actor holds. Hence, the pattern of preference commands an important position in deciding upon an action to be taken. On the methodological side, this behavioural model is constructed on the basis of two presuppositions. First, as in the case of the economic theory, the goal of an action is to maximize satisfaction as determined by an actor's preference. In the ideational theory, however, one's preference is neither fixed nor transcendently given. One's preference is ceaselessly modified and reformulated by subjective meanings and discursive interpretations of one's conduct. Accordingly, one's preference for getting marriage and having children is neither determined a priori nor fixed. Rather, since one's preference depends on one's own interpretation and meaning-giving, it can be regarded as endogenous and reflective. Second, in the ideational theory, individual beliefs and values affect the subjective meanings and discursive interpretations of human conduct, which consequently sets the desirable and preferable goal of the action. In other words, the purpose to be pursued and the action to be taken depend on individual beliefs and values. Hence, we can argue that beliefs and values play the most crucial role in the choice of an action. Following on with this behavioural model, the advent of new partnership and childbearing behaviours are derived from a change in values and attitudes (Etzioni 1999).

Although the two theories have a different methodological and epistemological framework, it is noteworthy that both of them see demographic behaviour as a purposive action. The two theories also share the view that marriage and fertility behaviour are performed in order to achieve certain goals. As argued by James Coleman (1986, 1990), when human conduct is purposive and goal-directed, it can be regarded as "rational". Moreover, since appropriateness for what an actor attempts to accomplish is central to being rational, a rational action denotes a type of conduct appropriate to achieving the actor's purposes, under given conditions and constraints (Simon 1983). From this point of view, the disparate behavioural models for these two theories can nevertheless be included in a category of rational action (de Bruijn 1999), for the ultimate purpose of a human action is, in the both models, to attain a desirable and preferable goal. In this regard, there is no marked difference between the two behavioural models.

On the other hand, the two theories differ sharply when it comes to concepts of behavioural appropriateness. In the economic theory, an action is appropriate if it can attain a goal with the least amount of economic cost under given constraints (Simon 1978, 1979). In other words, this theory defines a rational action as an action that brings the maximum amount of satisfaction with the minimum expense of social resources. In short, appropriateness of behaviour is seen here to be almost synonymous with means–ends efficacy (Elster 1986). Hence, according to the economic theory, by adhering to economically rational behaviour, one may achieve the optimal allocation of limited means and social resources, under a given constraint (Arrow 1987; Friedman and Hechter 1988; Hogarth and Reder 1987). Values and preference do not play an active role in this theory’s working definition of “rational”.

By contrast, in the ideational theory, appropriateness of behaviour stands within the realm of an actor’s recognition and understanding. More specifically, an action can be seen as rational as long as it achieves what accords with one’s beliefs and values. In other words, rationality is immanent in the meaning and interpretation of an action, depending upon the cognitive structure of one’s beliefs and values (Simon 1957, 1979, 1987). Thus, if one chooses an action suited to one’s beliefs and values, this choice will satisfy the appropriateness of behaviour, and this action will be regarded as rational, regardless of the amount of economic cost involved in goal attaining. We can, therefore, argue that, in the behavioural model of the ideational theory, the criterion of rationality consists in the appropriate link between a value and an action.

When it comes down to a concept of values, many definitions have been put forward in the social science literature so far. For instance, Rokeach (1970) states that a value is a type of belief regarding how one ought to behave or what goal is worth attaining. Similarly, Kluckhohn (1962) claims that a value is a conception of the desirable, which affects the selection of action. Notwithstanding various conceptualizations, it is generally accepted that a value refers to one’s enduring belief defined as a desirable (or preferable) mode of conduct or end state (Rokeach 1973). This belief determines the goal to be attained and the action to be taken. Furthermore, when a value is connected to specific objects and situations in an organized way, a specific attitude towards them is cultivated. Hence, a preferable action or end state an individual takes is decided by one’s value-orientation. From this point of view, it is natural to think that a preference is neither exogenous nor fixed (Lindenberg 1990). Rather, one’s preference is seen as endogenous and changeable. More specifically, one’s preference is formed by values in one’s belief. Furthermore, if one’s beliefs and values change, one’s behaviour also transforms in order to accord with one’s new preference. Hence, if a change in marriage and fertility behaviour is observed, this is regarded as the outcome of emerging different preferences caused by a shift in values and attitudes.

## 2.6 Two Types of Rationality in Social Action

As argued above, a marked difference between the two theories exists in the concept of rationality. Rationality in the economic theory is referred to as the material efficacy of means and ends (Heath 1968, 1976). The ideational theory regards rationality as an actor's cognitive and subjective consistency of values and behaviour. We should not forget here that the two types of rationality stand within the long-standing tradition of social action theory (Denzin 1990a, b; Swedberg 1998). It is especially worth noting at this point that Max Weber (1978a, b, 2002) classifies the social actions of human beings into four categories. Weber's first type of the action is an instrumentally rational action, which is taken by the actor with due consideration of conditions and means to attain a goal. The choice to take this action is made if it is the most efficient use of means and resources for the goal-attainment among the other possible uses of them. The instrumentally rational action is goal-oriented in the sense that the goal of the behaviour is determined a priori and the manner in which one behaves is organized only insofar as to choose an optimal means to an end at the minimum expense. The second type of action, according to Weber, is a value-rational action. This action is, regardless of the possible costs, put into practice by an actor's convictions of what is required of him or her by duty, honour, loyalty, faith, ethics, desirability, preference, and so on. Hence, it follows that, when taking the value-rational action, more importance is placed on adherence to a belief in a value and on engagement in a specific behaviour itself than in minimizing costs for the achievement of a goal. The third of Weber's actions is an affectual action, which is inspired by the actor's specific emotional state. This action usually occurs in the form of conscious release of emotional tensions. Weber's forth action is a traditional action, motivated by routine and habit. Traditional action can be seen as an automatic reaction to accustomed stimuli that guide behaviour in a routine course through repetition.

Although this typology of social action is constructed as an ideal type (or pure type), it is, at the same time, useful to understand the economic and the ideational theory from a broader framework of social action. As discussed, one's preference is exogenously given and fixed in the economic theory of marriage and fertility behaviour. Hence, the focal point is how to choose an action that enables the attainment of a goal with optimal means and resources. An actor in the economic theory decides to take a specific action only if it realizes his or her goal with the least amount of cost measurable by a monetary value. This mode of behaviour corresponds to Weber's instrumental rationality. Thus, it follows that, in the economic theory, marriage and fertility behaviour are viewed within a framework of instrumentally rational actions. In the ideational theory, however, since partnership and childbearing behaviour are seen to be guided by beliefs and values, they play a crucial role in choosing an action. In short, the consistent relation between one's values and one's conduct is a key element in the choice of one's actions. This indicates that the behavioural model of the ideational theory can correspond to Weber's value rationality, and marriage and fertility behaviour is viewed within

a framework of value-rational action in the ideational theory. Thus, a change in the pattern of partnership and childbearing behaviour in developed countries is explained through instrumental rational choice in the economic theory, whereas it is accounted for through value-rational choice in the ideational theory. From a viewpoint of the social action theory, we can therefore argue that the fundamental difference between the two theories consists in their disparate concepts of rationality.

## 2.7 The Institutional Environment for Demographic Behaviour

As seen in the previous section, the fundamental difference between behavioural models in the economic and the ideational theory can be found in each theory's concept of rationality. The economic theory is based on instrumental-rational choice, while the ideational theory is constructed around value-rational choice. Thus, when economic factors play an influential role in determining marriage and fertility behaviour in developed countries, it follows that the manner of this behaviour is determined by instrumental rationality. In contrast, where ideational and attitudinal factors are seen to be crucial in determining partnership and family formation, it is safe to say that demographic behaviour is being dominated by value-rationality. It is, however, difficult to determine theoretically which of these two contrasting ideas of rationality plays the dominant role in determining marriage and childbearing behaviour in a specific developed society.

The reason is that institutional settings formally or informally give structural incentives and disincentives to choices of human action, which in turn affect human behaviour and interaction (North 1990, 2005). Human behaviour does not take place in a social vacuum. An institutional environment that includes formal rules, social norms and traditional customs constrains a range of behavioural choices in a society and shapes socially desirable or permissible patterns of human conduct. Through an institutional environment, a microsphere of individual actions is linked to the macro-structure of society. Hence, there is no human action that is separated from social structures (Bourdieu 1977, 2005).

As mentioned earlier, the historical experience of the FDT in Europe shows that fertility started to decline under strikingly diverse socio-economic conditions (Coale and Watkins 1986; Knodel 1974; Knodel and van de Walle 1979; Lesthaeghe 1977; Teitelbaum 1984). Admittedly, the European Fertility Project cannot directly examine the effect of institutional factors on reproductive behaviour, but it is certain that this reduction in family size did not occur free from societal constraints. Rather, institutional settings circumscribe a range of behavioural choices within which people make decisions on the number of children they want to have. Although readiness, willingness, and ability are necessary conditions for

fertility control, their influence on reproductive behaviour emerges only when they are socially endorsed (Coale 1973; Lesthaeghe and Vanderhoeft 2001).

It is likely that the institutional environment has a similar impact on the process of partnership and family formation in a contemporary society (Morgan and Taylor 2006; Goldscheider et al. 2015). First, in the economic theory, getting married and having children are seen as the exchange and production of goods and services by partners or couples. These activities inevitably entail transaction costs (Pollak 1985; Williamson 1979, 1981). Since human beings do not automatically have the exact information on a space they require for an action to be taken (Simon 1957), they need to bear the costs involved in grasping details of the environment and the surrounding situation before they can be certain that their action can be successfully accomplished. Social action entails the cost of acquiring the necessary information to guarantee that a given action may take place properly and in accordance with accepted procedure. The same thing holds true for marital formation and childrearing. For instance, if a sufficient number of childcare facilities are supplied, parents can easily find a suitable nursery school to harmonize employment and childrearing. In this case, the institutional environment may give a strong incentive to having children, regardless of couple's earning power. By contrast, if searching for a desirable nursery becomes expensive and there is scant provision of childcare services, worse-off people may think that childrearing is particularly burdensome and risky. Furthermore, they may prefer a small family size in order to avert various kinds of risks in a future (McDonald 2002). In such a situation, economic factors may have a relatively stronger impact on fertility behaviour. As is well known, the availability of childcare services is considerably affected by institutional factors such as welfare and family policies (Brodmann et al. 2007; Neyer 2013). Hence, even if parents behave in the instrumentally rational way, it is likely that the influence of economic factors will vary depending on the institutional context.

In the second place, the informal codes of conduct found in social norms and traditional customs regulate individual behaviour in order to establish cooperative and less frictional human interactions in a society. Since people are embedded in social networks and human relations, they produce socially approved roles and forms of behaviour (Bernardi and Klaerner 2014; Casterline 2001; Granovetter 1985). If a member of a social group takes an action that diverges from such social norms, he or she may suffer informal sanctions, for these norms and customs limit the range of behavioural choices one can make. Thus, if individual values and attitudes are in strong conflict with social norms and conventional customs, people may unwillingly modify their value-rational actions or stop choosing them. Where values and attitudes are weakly confronted by social norms and customs, one may dare to perform one's value-rational actions in the face of social pressure. Whichever option is taken, the fact remains that an actor must bear the psychological cost. Perhaps a high cost would cause the actor to hesitate from taking an action, while a low cost might encourage him or her to choose to act. In short, the psychological cost entailed in a value-rational action will depend on the institutional environment, which, in turn, will provide an incentive or a disincentive for a specific action.

The same holds true in the case of marriage and childbearing behaviour. To be specific, a deep conflict between individual values and institutional norms regarding social and family life may make a value-rational actor highly reluctant to get married and have children. The reason for this is that people could not bear the psychological cost and may avert the risk of disrupting their intimate or personal spheres. However, a less abrasive, more harmonious relation between one's values and social norms may produce a state of willingness on the part of the actor to marry and bear children at modest psychological cost. Social norms regarding the division of gender roles are good cases in point. Indeed, it is indicated that the unequal allocation of domestic work between men and women in developed countries has a bearing on their marriage and fertility behaviour (McDonald 2000a, b, 2006, 2013a, b; Mills 2010). In most cases, a considerable amount of housework is put on a wife's shoulders, while her husband does little or no domestic work. Undoubtedly, this unequal division of domestic labour is sustained mainly by social norms and traditional customs (Rindfuss et al. 1999). This situation is psychologically burdensome for women who set their primary arena for self-fulfilment in the workplace, for cognitive dissonance occurs between their reality and the life they desire. It is, indeed, pointed out that Italian and Japanese women suffer a sharp conflict between intra- and extra-familial roles (Bumpass et al. 2009; McDonald 2002). This conflict needs to be resolved by paying psychological coordination costs. For the sake of harmonizing employment and family life, women may strive for equity in the allocation of domestic work against psychological pressures brought about by the social norms. Yet, in the face of powerful social norms, women may modify their life plan instead and pursue an alternative goal, the desire for self-fulfilment in the workplace notwithstanding. Due to perceived obstacles and anticipated impediments, the desirable goal pursued by value rationality is transformed into a viable option (Ajzen 1988, 1991; Ajzen and Klobas 2013; Fishbein and Ajzen 1975). Moreover, as shown in Aesop's fable "The Fox and the Grapes", beliefs and values may be rationalized to harmonize with a feasible action (Elster 1983, 1990). Thus, coping with informal codes of conduct and a host of social pressures, the process of marriage and childrearing entails psychological coordination costs. If these costs are extremely high, value rationality may play a relatively minor role in marriage and fertility behaviour.

In addition, it should be borne in mind that the initial conditions of institutional contexts will vary from society to society; these conditions will, in turn, affect the development of the space in which a social action will be committed in the future (Nelson and Winter 1982). More specifically, since institutional settings provide behavioural incentives and disincentives at the outset, a specific action may be encouraged or discouraged. The repetition of this action may, in turn, consolidate and reproduce the institutional structure and determine the direction of behavioural changes (Garrouste and Ioannides 2001). In short, since initial institutional conditions determine a future situation, the development of human behaviour has path dependence (David 2001). The same may hold true for partnership and fertility behaviour in developed countries. Even if earning power approaches parity between men and women, every developed country may not

experience the same decline in marriage. Likewise, if a value shift occurs in the way that Maslow (1970) formulates, there is no guarantee that divorces and extra-marital births will be ubiquitous in areas outside North-western Europe (Surkyn and Lesthaeghe 2004). From a historical point of view, it appears to be likely that the wide variety of institutional contexts will allow families and partnerships in developed countries to evolve into diverse directions (Thornton 2005). Indeed, the traditional distinction in the pattern of family formation proposed by Hajnal (1983) is still maintained in Europe as a divide between strong and weak forms of family (Reher 2004). By the same token, the rate of extra-marital births has kept relatively low in Italy, although it shares a similar socio-economic situation with other European countries (Dalla Zuanna 2004a, b). Likewise, institutional contexts inherent in Japanese society may be related to its postponement of marriage and childbirth (Bumpass et al. 2009; Tsuya and Bumpass 2004). All in all, the impact of economic and ideational factors on marriage and fertility behaviours is affected by the institutional environment of a society. We can therefore conclude that the relevance of the economic and ideational theories in Japan needs to be examined by an empirical study.

## 2.8 Conclusion

The primary purpose of this chapter was to reconsider the economic and the ideational theories of marriage and fertility behaviour from a viewpoint of social action theory. For this purpose, the descriptive relevance of the SDT in developed countries was, first of all, examined. Next, we compared and contrasted the methodological and epistemological features of the economic and ideational theories. Subsequently, the behavioural models of the two theories were reformulated from a standpoint of rational choice theory. Finally, the importance of the institutional environment was discussed.

With reference to the descriptive relevance of the SDT, developed countries after the 1960s have experienced more diverse demographic changes than envisaged in this theory. Indeed, even though the TPF<sub>R</sub> reached the below-replacement level, the rate of extra-marital births or cohabitation varied from one country to another. For this reason, it is not appropriate to regard this grand narrative as a universal description of changes in marriage and fertility behaviour in these countries. Historically speaking, the evolution of demographic patterns is not unilinear, but multilinear. With these points in mind, it is quite difficult to provide a universal description on a change in partnership and family formation in developed countries after the 1960s. Moreover, even if such a description is portrayed, an exceptional case will come into existence. We may therefore argue that the conceptional significance of the SDT does not consist in its descriptive side.

The second point of this chapter was to explore how the economic and the ideational theories differ considerably in the explanation of marriage and fertility behaviour. The former theory explains marriage and childbirth behaviour

from a material and objective point of view, while the latter theory accounts for them in terms of values and attitudes. Methodologically speaking, this difference between the two theories was derived from their models of human behaviour. In the economic model, the purpose of a human action is to optimally allocate limited social resources such as wages and time in order to maximize satisfaction (utility). Furthermore, the structure of satisfaction is determined by stable and exogenously given preference. Thus, the central issue of this model is the attainment of a goal with the minimum cost. The ideational theory, however, postulates a preference-centred heuristic model of human behaviour. A preference is formulated by subjective meanings and discursive interpretations. Furthermore, individual beliefs and values produce subjective meanings and discursive interpretations, which consequently work to define desirable conduct. Thus, in this behavioural model, one behaves in the way that accords with one's beliefs and values. Furthermore, it is safe to say that the central significance of the SDT is the application of this heuristic model to marriage and fertility behaviour in developed countries.

As the third point of this chapter, we found that, although these two theories have a different behavioural model, they are arranged in an integrated way from a viewpoint of rational choice theory. The behavioural model for the economic theory can be referred to as a Weberian instrumentally rational action, the goal of which is determined a priori; it is organized only to choose an optimal means to an end at minimal expense. In the ideational theory, however, human behaviour is seen from a viewpoint of value-rational action chosen by an actor's convictions of what is required of him or her, regardless of the possible costs entailed. Despite the differences in the two behavioural models, they are categorized within the realm of rational action. We can, therefore, argue that a fundamental difference between the two theories may be found in the type of rationality postulated.

Fourth, this chapter explored the influence of rationality on marriage and child-bearing behaviour as contingent upon an institutional environment. Institutional settings affect the amount of transaction costs necessary for partnership and family formations, which, in turn, have a bearing on the economic costs of marriage and childrearing. At the same time, psychological coordination costs are also affected by institutional factors, which consequently alter the influence of value rationality on demographic behaviours. Taking these points into account, it is safe to say that the impact of economic and attitudinal factors varies from one country to another. Empirical research is, therefore, necessary to judge whether more recent marriage and fertility patterns in Japan are affected by economic or attitudinal factors.

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Fukuda, N.

2016, XIII, 183 p. 28 illus., Hardcover

ISBN: 978-981-10-0292-2