

Value Orientations, Economic Growth and  
Demographic Trends - Toward a Confrontation?

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1. Introduction

Many students of population issues find it rather hard to integrate changes in value orientation in their explanatory frameworks. Obviously, there are reasons for this and some reasons are better than others. Yet, very few people would argue that societies have temporally fixed images of goals (such as salvation, wisdom, beauty, friendship, freedom, happiness or inner peace and harmony). Also, nobody thinks of himself as having worked out a definitive ranking of orientation toward power, success, material comfort, sexual or spiritual intimacy, excitement, pleasure. But we do accept that there may be a latent hierarchy that reveals itself when critical choices have to be made. Furthermore, we show regret, not only when costs and benefits of a given choice turn out to be respectively higher or lower than anticipated, but also when we reshuffle our priorities of life.

Hence, the problem does not lie so much with the fact that we deny the existence of value orientations, but in the way we treat them in the social sciences. For instance, some economists have dealt with the issue by assuming the primacy of homo economicus: value orientations and actual behaviour are then co-determined outcomes and form a pair connected by purely spurious relationships. In other words, value orientations are treated as being endogenous. Others find value orientations elusive and unmeasurable, and lock them up in an unspecified residual category, called "tastes". Still others recognize that measurement can be attempted, but find it unreliable. For them, there exists a latent pattern of value hierarchy but it is difficult to get at: there is presumably some consistency over time between such latent structures, but weak correlations between measurements and latent structure at each time point account for low temporal consistency of empirical measurements at the individual level (e.g. Converse, 1964; Inglehart, 1985).

The treatment of value orientation as purely endogenous omits a crucial

feedback mechanism : environment and economic circumstance not only condition the content of culture, they are also controlled by it (e.g. Parsons, 1977, p.8). Ascetic Protestantism in the 16th and 17th centuries, for instance, resulted from an earlier capitalist evolution and the concomittant corruption of Christian ideals by nobility, clergy, merchants and administrators. During the following two centuries however, ascetic Protestantism contributed forcefully to the economic, scientific and technological development in England and the United Provinces. Similarly, the industrial revolution of the 19th century conditioned the growth of new ideologies, which in their turn shaped the Western European welfare state. As these ideologies find their place in the European political spectrum, the goals of economic equity and security rise in ranking relative to other goals such as productivity and competition. This has obvious effects on economic and social policy. These two examples probably suffice to indicate that a framework with strict endogeneity of culture and without a feedback is like a theory of physics that has the concept of action, but not that of reaction.

The measurement problem raised by the second group of critics is far more serious, but less hopeless than often believed. There is indeed an undeniable problem of reliability and validity in survey measures that wish to establish value hierarchies for individuals. Rokeach, for instance, has been able to take a two-wave panel measurement of the ranking of 19 items of ultimate goal attainment (see the list presented in the first paragraph of this paper). The panel consisted of 933 individuals. The ranks given in 1974 for a given item were correlated with the ranks obtained 7 years later, i.e. in 1981. The correlations between these two series of ranks vary between .26 and .44 for 18 of the 19 items in the Rokeach battery. Only the ranking of the item "salvation" proved more consistent over time with  $r=.68(1)$ . Apparently, individual rankings are highly susceptible to the influence of the current mood or the recent experience of respondents (with the exception that a person is rather consistently either concerned about salvation or not concerned about it at all). In the aggregate, however, such noise cancels out and much greater stability emerges. This often shows in two ways. Firstly, when the basic dimensions present in a battery of items are extracted through factor analysis, there is a high consistency over time of factor loadings and factor identification. Secondly, for each of the constituent dimensions, average scores show

remarkable temporal stability for subgroups defined according to age, education, income, profession, political affiliation or religious involvement. In short, there is a marked contrast between high individual-level flux and high aggregate stability. Fortunately, our role here is not that of a counsellor who has to offer advice to individual clients on the basis of individual test-results with a wide margin of error, but rather that of an interpreter of aggregate trends.

In what follows, I have merely pasted together information that I consider of importance for the future course of reproduction and for overall demographic trends in industrialized countries. The empirical evidence is mostly published elsewhere, but it does not harm to bring it together and to tease out some basic directions.

## 2. Value orientation and family formation: historical evidence on the impact of secularization

A.J. Coale can be credited with the apparent truism that the fertility transition occurred when a population was "ready, willing and able". "Readiness" referred to the presence of an economic or material advantage, "willingness" to the moral acceptability of both the evaluation process and the outcome, and "ability" to the availability of method. So far, we have found that readiness is largely conditioned by the possession of capital and a mode of production which is not jointly familial and labour intensive. Virtually all social groups that were trendsetters in their societies with respect to fertility control belonged to the nobility, the entrepreneurial bourgeoisie or land-owning farmers (see for instance Livi-Bacci, 1985), whereas tenant-farmers, cottagers, farm labourers and also miners tend to be among the last (see e.g. Lesthaeghe and Wilson, 1982 and Haines, 1979). Hence, the social groups that have the greatest utility for fertility control are also those that experience friction with the existing moral order, which contains a codification of an earlier need for high fertility. It is therefore no surprise that secularization, or the breaking away from the teaching of the Christian churches, is a good indicator of willingness, and that such willingness follows in the wake of readiness. However, the strength of this connection is historically highly variable: France, and to some extent also the US, were far ahead of the other Western nations in adopting an instrumental morality with respect to

matters of family formation(2). Two conclusions can be drawn from this: (i) indicators of secularization are good indicators of willingness and (ii) readiness is a necessary but not a sufficient condition for willingness.

The link between secularization and parity-specific fertility control can be traced back in France to the period prior to revolution of 1789. On the basis of the family reconstitution material of L. Henry, David Weir has documented that progression to the first and second child remained constant, but that progression ratio's for third and higher-order children underwent a decisive drop around the time of the revolution itself (Weir, 1983, 1985). When inspecting his findings on a village level, however, Weir also discovered that this pattern was not observed everywhere, but was found predominantly in villages that prior to the revolution paid no longer attention to the Church's ban on marriages being contracted during lent and advent. Apparently, some degree of secularization had already taken place in many regions in France (see also the decline of religious incantations in testaments reported by Vauvel in southern France during the 17th and 18th centuries), presumably as a result of early shifts in value orientation (e.g. less preoccupation with salvation), and as a reaction to the social order of the Ancien Régime. In the end, there was little or no problem with willingness in such regions once readiness for parity-specific fertility limitation manifested itself.

A second series of studies measure the effect of secularization at the time of the marital fertility decline in the other regions of Western Europe, i.e. from 1870 onward. It was found that a voting pattern for secularized parties (socialists, communists, liberal) was a good, if not a better predictor than proxies of economic development such as the degree of urbanization and industrialization (Lesthaeghe and Wilson, 1982). In countries with a Catholic tradition especially the net effect of secular voting was a salient feature. Moreover, the conformism versus non-conformism pattern that did well in the prediction of the regional pattern of marital fertility control, did equally well in predicting leads and lags with respect to the later changes in family formation, such as the decline of the late Malthusian marriage pattern, the rise of divorce and the modernization of contraception. In other words, an ecological syndrome was maintained for a full century, i.e. from 1870 to at least 1970

(Lesthaeghe, 1983).

The problem with these studies is of course the ecological nature of the correlations that are used. This obstacle was eliminated when survey measurement was adopted after the Second World War allowing for individual measurement of secularization. Before turning to these, a word should be said about the endogeneity of secularization. Here, it is again clear that the issue of fertility control also spurred secularization: individuals who felt a need for controlling fertility would have a higher likelihood of breaking away from organized religion and from the Christian pillars (composed of church, party, labour union, schools, press, youth organizations). However, a readiness for fertility control was not the only factor involved that would engender such a movement. Conversely, continued faithfulness could also be maintained despite a need for controlling fertility. The outcome is that by the 1920's many Western European societies have sorted their individuals to a considerable extent into competing and often hostile pillars, a feature which is known as Versäulung (German) or Verzuiling (Dutch). In this system, client relationships and indoctrination (via the school systems, youth organization, mass media...) led to a high degree of collective assertion of value orientation, and hence to the stability of ecological correlations over time. In other words, regional voting patterns, church-attendance figures and measures of family formation and dissolution correlate strongly with a common latent dimension during the period characterized by the dominance of "pillarized" social organization. With a weakening of individual pillar-attachment (i.e. "ontzuiling"), a process that was well under way in Western Europe during the 1970's, the stability of the ecological pattern weakens as well.

Micro-level associations between religious involvement and changes in the family are equally striking. This is less evident when religion is approached from the denominational angle only. In fact, denominational differences have shrunk, to the point that the "end of Catholic fertility" was announced for the US (Westoff and Jones, 1977; Westoff, 1979)(3). However, when religious involvement within each denomination is considered (e.g. through service attendance or through a religiosity scale) there is no weakening of the associations. Hence, the degree of religious involvement was not only a strong predictor of divorce and modernization of

contraception in the 1960's, but it is at present an equally important micro-level factor in the choice between cohabitation versus marriage (e.g. Carlson, 1984, for France; Willems and Vanderhoeft, 1985, for Belgium; CBS, 1984, for the Netherlands; Khoo, 1985, for Australia) in acceptance of induced abortion, in progression to a second child (e.g. Teachman, 1985 for the US), in accepting childlessness (e.g. Veevers for Ontario, 1980; den Brandt, 1982, and Niphuis-Nell, 1981, for the Netherlands; Wijewickrema, 1985, for Belgium) and in defining sex-roles (Thornton et al, 1983, for the US). In all instances the absence of or low religious involvement is strongly related with innovation or rapid adoption of new forms of demographic behaviour.

It may be useful to introduce an example here, just to show the order of magnitude of the secularization effect at the micro-level. Vanderhoeft and Willems were interested in fitting data on entry into a first union, which can occur either directly via marriage or via informal cohabitation. The data stem from a family survey held in Flanders in 1982-83 and pertain to the experience of the 1970's in a region which, by a Western European yardstick, still tends to be on the conservative side with respect to the adoption of new patterns of family formation. The authors fitted the data with an education-stratified proportional hazards model (education at this point just shifts the starting point of entry into a union) with competing risks (obviously marriage versus cohabitation). The covariates of tempo and intensity were female education, secularization and their interaction. The results, presented in Table 1, show that regularly-practising Catholic women have entirely maintained the pattern of the 1950's and early 60's: by age 35 only 1 per cent start a first union via cohabitation. By contrast, freethinkers with more than secondary education have a Scandinavian pattern, and 44 per cent start a first union via cohabitation. In other words, the two extremes in terms of secularization combined with education define a very wide range. Finally, if the data are limited to the youngest age group (i.e. below 25) rather than for all women up to 35, a cohort effect is revealed with even more cohabitation for all groups, except regularly-practising Catholics.

A consistent historical record on the association between secularization and change in family and reproduction does not reveal very much about the meaning of secularization itself. Secularization at the time of the

Table 1 : Pattern of First Union Entry for Flemish Women; Estimates of Percentages going Directly into Marriage or via Cohabitation by Age 35, Experience of the 1970's and up to 1982.

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	<u>% Directly into Marriage</u>	<u>% First via Cohabitation</u>
Primary Educ., Regular Church Attendance	99	0
Post-secondary, Regular Church Attendance	98	1
Primary, Irregular Church Attendance	92	6
Post-secondary, Irregular Church Attendance	85	13
Primary, No Church Affiliation	87	9
Post-secondary, No Church Affiliation	71	26
Primary, Freethinker	78	21
Post-secondary, Freethinker	52	44

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Source : P. Willems & C. Vanderhoeft (1985) "Alleenwonen, samenwonen, huwen en scheiden", forthcoming in Bevolking en Gezin, Brussels.

Note : Estimates are based on an education-stratified proportional hazard model with two competing risks. Data are from the NEGO 4-survey, 1982-83 (N = 2520).

Enlightenment or the French Revolution and secularization at present may share a common set of elements, such as less stress on salvation or a personified god, rejection of religious authority in certain domains, greater stress on personal freedom of choice, but there are other components that presumably grew over time, such as self-fulfillment and the rejection of a much broader range of institutions. In other words, major shifts have taken place within the secular order, thereby creating a variety of value orientations which are all secular but not necessarily correlates of the same latent dimension. It is to these that we shall now turn.

### 3. Value orientations in the Post-Industrial Society

In his 1976 foreword to "The Coming of the Post-Industrial Society" D. Bell describes post-industrialism as a new techno-economic order based upon the centrality of theoretical knowledge, the creation of a new intellectual technology, the spread of a "knowledge class", a shift from the production of goods to that of services, a change in the character of work, a redefinition of the role of women, a "domestication" of science by other agents, the emergence of new power locations, the rise of a meritocracy, and last but not least, a boom in information gathering and control (Bell, 1976a). However, Bell also notes a widening disjunction between this techno-economic order and the other components of societal structure, namely polity and culture. In essence Bell (1976b) points to the emerging contradiction between, on the one hand, the utility orientation of the economy, the efficiency orientation of polity and the solidarity orientation required for integration (Parsons, 1960) and, on the other hand, the growing hedonistic self-orientedness of personality:

"What is left is a technological engine, geared to the idea of functional rationality and efficiency, which promises a rising standard of living and promotes a hedonistic way of life. (...) What this means is that the society is left with no transcendent ethos to provide some appropriate sense of purpose, no anchorages that provide stable meanings for people" (Bell, 1976a, p.xxi).

The trend toward self-fulfillment was also embedded in Maslow's theory of the need-hierarchy of motivation (Maslow, 1954): when physiological and

security needs are satisfied, a shift occurs toward a need for love and respect and ultimately for self-fulfillment. In the terminology of Allardt and Uusitalo (1972), orientations move from being centered around "having" to being connected with "loving" and "being". From this angle, any shift toward self-fulfillment (i.e. Maslow's higher-order needs) would simply stem from economic growth and the maintenance of peace since 1945 in the West, and would not per se be connected to the techno-economic transformations listed above that make up of the fabric of the post-industrial society. In other words, according to the economic theory, a shift in value orientations (or Wertwandel) can be explained adequately by a prosperity theory. The matter is probably not so simple. For instance, the centrality of information gathering and of information control has operated in more than one way on the phenomenon of Wertwandel. On the brighter side, mass media have spurred the spread of new ideas and preoccupations, and paid ample attention to emancipation movements that carried them (e.g. feminist or ecology movements). On the darker side of the post-industrial society, the emergence of new locations of power and the manipulation of information, not to mention the spectre of nuclear warfare, are compatible with a growing sense of alienation among individuals toward institutions in general, and towards those that are at the "high-tech" end of the range in particular. Hence, what may be critical for Western Wertwandel is the concurrence of material prosperity with the enhancement of instrumental powers in the hands of institutions such as multinationals, government bureaucracies, the military, research institutions or social complexes (e.g. hospitals). In his sense, we are not dealing solely with a prosperity theory but also with an alienation theory: individuals are supplied with the economic means for seeking self-fulfillment, and with political motives for either anti-establishment orientations, greater indifference toward public affairs or outright withdrawal into their personal sphere.

Empirical research on Wertwandel during the last 15 years has been considerable. Much of it is of relevance here, and we shall give a brief account of its major findings. A central position within this type of research has been occupied by Inglehart's "materialist" versus "post-materialist" scale in which he contrasts value hierarchies that give priority to physical security and economic advancement, growth and stability ("materialist") with those that stress social and personal

actualization ("post-materialist") (1977, p.42). Inglehart's battery of 12 items(4) has been systematically used in the EEC-Eurobarometers and in American surveys, involving thousands of respondents over more than a decade. Principle component analyses performed on these items show highly consistent loadings across nations and over a period of more than a decade (Inglehart, 1977, p.44; 1982, p.445; 1985, p.112). Other methods that allow for multidimensionality, such as hierarchical cluster analysis, produce results (Herz, 1979) than can be reduced directly to Inglehart's solution (Inglehart, 1980, p.149). Finally, there is congruence between a "post-materialist" and an "anti-establishment" orientation (Burklin, 1981, p.377). For instance, "post-materialist" orientations are highly prevalent in the Western European peace movement (Inglehart, 1981, p.891-92; 1983, p.139 ff.), in ecology-parties or the "Greens" (Müller-Rommel and Wilke, 1981, p.383 ff.; Müller-Rommel, 1982, p.383 ff.), or in other "Third Force" movements in countries with a dominance of the two-party system such as Britain or the USA (Miller and Taylor, 1985).

Among Inglehart's findings, three are of considerable relevance here. Firstly, there appears to be a marked cohort effect, with younger cohorts systematically shifting toward "post-materialist" orientation. Secondly, "post-materialism" is encountered much more frequently among higher than among lower social classes. And thirdly, there are traces of considerable shifts in value orientations in Japan as well.

Before presenting the empirical material, a word ought to be said about measurement. Inglehart makes a distinction between pure and mixed types. The pure types are those that make a consistent first and second choice for items that belong to either the "materialist" or "post-materialist" set. Together, the pure types account for 40-55 percent of the population. The Inglehart-index is defined as the difference in percentages "pure post-materialists" and "pure materialists". From published tables that include all categories, however, it seems that mixed types generally have attitudes that are closer to those of "materialists". This holds particularly with respect to voting (Inglehart, 1979, p.530; Veen, 1984, p.10), factors of job attraction (Inglehart, 1977, p. 451), support for or membership of the peace movement (Inglehart, 1984, p.531), attitudes toward the Atlantic Alliance (Inglehart, 1984, p.534), defense of present society and protest potential (Inglehart, 1981, p.891). This tendency is confirmed

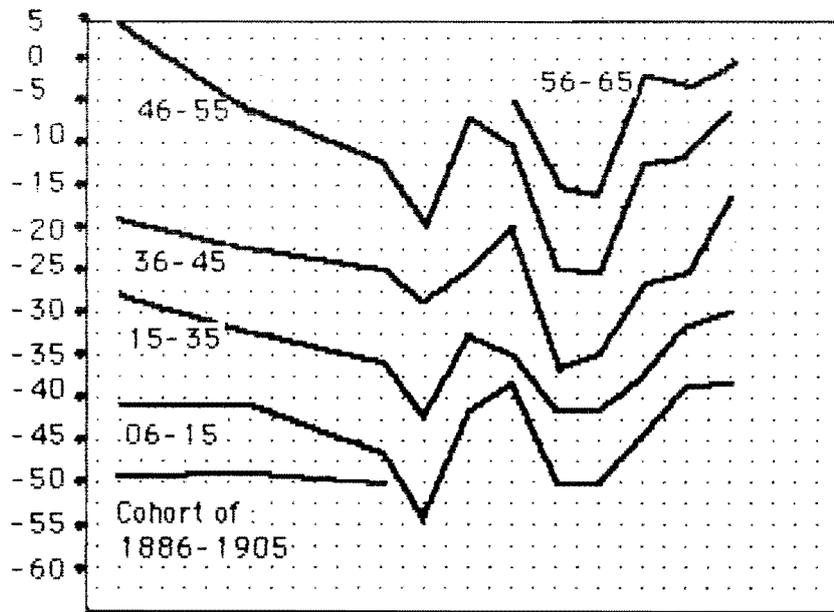
by March (1975) who uses a similar typology for the British public. March distinguishes between "acquisitives", "intermediates" and "post-bourgeois", which have virtually identical frequencies of occurrence as Inglehart's groups. Again, "intermediates" were found to be closer to "acquisitives" on overall life satisfaction and happiness (p.23), satisfaction with job, marriage, family life, leisure, district politics and democracy (pp.24-25). Hence, the Inglehart index that confronts the two extremes creates somewhat the impression that "post-materialist" orientations are more prevalent than they really are. The simple percentage "pure post-materialists" may therefore be a more adequate indicator.

In the first surveys of 1970 a marked age pattern was found: "post-materialist" orientations were far stronger among the young than the old. Inglehart interpreted these findings as a cohort effect and connected "post-materialism" among the young to their post-war experience of increased affluence. Critics (e.g. Dalton, 1977; Van Deth, 1983) suggested a life cycle effect instead: with increased age, maturity and responsibilities, "materialism" would take over. At present, the Inglehart index can be computed for a time span of more than a decade and it is clear that the cohort effect is overwhelming. This can be seen from the figure that Inglehart published in 1983 in response to Van Deth and which has subsequently been updated to incorporate the Eurobarometer results for 1984. This latest figure is reproduced here (Inglehart, 1985, p.107) together with the trend of the inflation rate. The data pertain to the six original member states of the EEC. As figure I shows, the cohort lines are neatly layered with ups and downs in function of current inflation. A similar layering would also occur in the instance of a pure life cycle effect but the lines would exhibit a typical downward slope: as each cohort ages, "materialism" would increase and the index would drop. Such a downward slope is not present, or if it still exists, it is entirely masked by period effects. With the benefit of hindsight, it turns out that Inglehart's original cohort interpretation was correct and that a gradual historical trend toward more "post-materialism" has been building up with a possible acceleration for those socialized after the second World War. The coming of the post-industrial society, as envisaged by Bell, and the growth of the "post-materialist" value orientations have largely coincided.

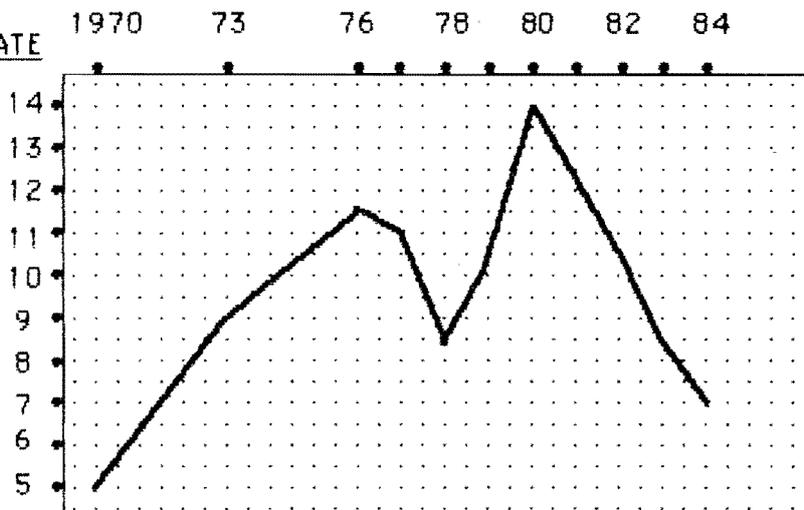
The second point is that "post-materialism" trickles down from

INGLEHART INDEX

Percentage pure post-materialist  
minus percentage pure materialist



INFLATION RATE  
(PERCENT)



**FIGURE 1 : INGLEHART INDEX OF VALUE PRIORITIES BY BIRTH COHORT  
( TOP ) AND INFLATION RATE IN THE SIX ORIGINAL EEC-COUNTRIES  
( BOTTOM ), 1970-84.**

SOURCE : R. INGLEHART, 1985, p.107 AND EURO-BAROMETERS.

upper to lower social classes. This feature is shown in Table 2 on the basis of the combined data for 9 EEC-countries during the period 1976-79. Within each age group, top civil servants and managerial staff, professionals and white collar groups have the highest incidence of "pure post-materialist" orientations, whereas self-employed business persons, manual workers, housewives and farmers show a strong preponderance toward "materialism". Students rank high on "post-materialism", partially because of their age, and can be considered as part of the trend-setting group. Interesting is also the orientation of the younger unemployed. One can readily expect that those who suffer most from material deprivation would have a strong "materialist" orientation. This expectation is borne out for the unemployed above 35 and especially those above 50, but for those younger than 35, a distinct preponderance of the mixed orientation is found (60 per cent, or the maximum in the entire table).

Any comparison between the West and Japan is hazardous: items that have a consistent connotation in one cultural or historical setting may have quite a different meaning in the other. Yet, there is considerable evidence about intergenerational value change in Japan reported by both Japanese and Western observers (e.g. Research Committee on the Study of the Japanese Character, 1979; Flanagan 1979 and 1980; Inglehart, 1982). Flanagan (1979) indicates the directions of this change as follows: (i) from frugality toward self-indulgence, (ii) from piety and self-discipline toward secularism and permissiveness, (iii) from conformity and dependency toward independence, and (iv) from devotion to authority towards self-assertiveness and cynicism. The Japanese National character surveys organized since 1953 provide most of the data and they show massive cohort and education-related changes with respect to the importance of money in life, religion, the following of customs, the importance of the nation and authority (Flanagan, 1979, p.261). There is some debate as to whether these changes can be interpreted within the Inglehart framework. The outcome seems to be that the rise of "post-materialism" is definitely present(5), but as part of a broader, more multidimensional reorientation. Multidimensionality can be inferred from the fact that different items are stressed across nations within the "materialist" and "post-materialist" subsets. This can be seen in Table 3 where the data are presented for comparable items in West-Germany, the Netherlands, the US and Japan. When the percentages are added up for the four "materialist" items, Japan has

Table 2 : "Materialist" versus "Post-Materialist" Values by Occupation and Age Group in 9 EEC countries, 1976-79 Surveys Combined

Occupation	Age LT 35 (N=19929)			Age 35-49 (N=12781)			Age 50+ (N=18087)		
	% Mat. (1)	% Post-Mat. (2)	(2)-(1)	% Mat. (1)	% Post-Mat. (2)	(2)-(1)	% Mat. (1)	% Post-Mat. (2)	(2)-(1)
Top management, top civil service	20	30	+10	22	22	0	28	16	-12
Students	20	25	+ 5	-	-	-	-	-	-
Professionals	25	21	- 4	21	19	- 2	29	12	-17
Non-manual employees	26	18	- 8	34	13	-21	38	9	-29
Unemployed	24	16	- 8	38	9	-29	48	6	-42
Self-employed business persons	35	13	-22	41	10	-31	43	7	-36
Manual workers	32	11	-21	40	8	-32	44	5	-39
Housewives	38	9	-29	46	6	-40	50	5	-45
Farmers	42	10	-32	44	5	-39	48	4	-44
Retired persons	-	-	-	-	-	-	51	5	-49

Source : R. Inglehart (1981) : Post-Materialism in an Environment of Insecurity, American Political Science Review, p. 893;

Data from Euro-Barometers.

Table 3 : Value Orientation Priorities in the West and Japan, 1974-76

Item	Percentage of Respondents Selecting Item as 1st or 2nd Priority in :				
	More Materialist Western European Country (type : F.R. Germany)	More Post-Mater. Western European Country (type : Netherlands)	USA	JAPAN	
Mat. {	Stable economy	74	31	52	59
	Fight against crime	47	48	42	20
	Economic growth	22	14	15	9
	Strong defence forces	8	5	32	5
		151	98	141	93
Beautiful Cities and Countryside	8	13	6	36	
Post-Mat. {	More say on job	17	34	21	12
	Friendlier, less impersonal society	13	29	11	37
	Society where ideas count	11	26	21	22
		41	89	53	71
Total	200	200	200	200	

Source : R. Inglehart (1981) : "Changing Values in Japan and the West", Comparative Political Studies, vol. 14, no. 4, p.468.

Note : the totals add up to 200 per cent as first and second choices are taken into account.

the lowest overall score on "materialism". However, a substantial proportion of the Japanese public stresses the environmental item. In the Western scaling pattern, this item fails to discriminate between the "materialist" and "post-materialist" orientations (factor loading near zero). Furthermore, the Japanese score low on the physical security items in the "materialist" set, but not on the economic ones. By contrast, the American public attaches a great deal of importance to the security items and to being a super-power. Among the "post-materialist" items, the issue of an impersonal society attracts most attention in Japan, a feature which may be related to an authoritarian tradition and current crowding. Hence, the Inglehart battery may be more useful for catching trends within more cohesive economic and cultural settings (e.g. the EEC) than for wider cross-cultural comparison. In other words, several dimensions are successfully projected onto a single one thanks to high correlation between (oblique) factors in the West, but multi-dimensionality emerges more forcefully when other cultures are added.

Irrespective of this issue of validity, of direct importance for the subject of demographic change is that value shifts in Japan have been massive during the post-war period, that they have a strong cohort component and that they are also trickling down from the more to the less educated. In other words, the trends toward more individualism, self-assertiveness, toward less conformism (or even toward an anti-establishment orientation among students or anti-nuclear groups) are definitely associated with post-war prosperity. But, in as much as these orientations also follow a model of innovation and penetration originating with new elites, they are likely to be self-sustaining and to influence choices in the political, economic and demographic domains. In other words, there is also a feed-back effect.

#### 4. From value orientation to family formation

So far, we have merely gathered factual information about two important shifts in the value systems of capitalist industrialized societies: the long historical build-up of secularism and the later trend toward "post-materialism". Now, we face the problem of connecting these to the post-war demographic record.

Two problems come to mind. Firstly, although it is clear that there is a direct connection between secularization and the emergence of new patterns of family formation, how can a secular trend in secularization be reconciled with the post-war increase in fertility (cf. Roussel, 1985, pp.151-152)? Secondly, it is equally clear that the "post-materialist" orientation is connected with an "anti-establishment" orientation, but does this imply that there is a link between the rise in "post-materialism" and the decline of familism?

With respect to the first issue, it is not at all evident that the degree of secularization in the West has followed a linear trend, as presupposed by Roussel's objection. During the second World War, for instance, church attendance climbed to levels unprecedented during the previous decades in occupied Europe. Moreover, the pace of secularization during the late 1940's and the 1950's may have been slower than during the 1960's when fertility started falling again. A century long trend in secularization has been measured by J. Simmons for Britain (1980, p.143) on the basis of Easter duty fulfillment. Simmons data show an increase in Easter communion attendance from 1947 to a post-war maximum for the period 1954-61, and then a steep drop from about 1963 onward. Hence, at least for Britain, there is no lack of parallelism with fertility as Roussel suggested, but a clear concordance. Another example that supports the continuity of the link is provided by the disappearance of the high fertility belt in the Southern Netherlands and Northern Belgium (i.e. North Brabant, the Limburg provinces). This occurs only in the 1960's, concurrently with a record drop in church attendance and the development of the new "liberal" theologies within European Catholicism. Consequently, the post-war trend in secularization in Western Europe merits further research before it can be concluded that there was a rupture in its connection with family formation during the 1950's.

The secularization hypothesis by no means rules out the force of other factors. For instance, post-war familism can also be viewed as a lagged reaction to the previous period of deprivation. During a depression or war, nothing would seem more attractive than the luxury of family life. This holds particularly when the working classes are still aspiring to the family model of the bourgeoisie, a tendency which is established during the 19th century, and especially after 1880 thanks to rising real income.

After the second World War, families again came within reach of the means to establish a "mini-welfare state", with husbands providing adequate incomes, wives running it, and children displaying its success. Considered from this angle, the 1950's constituted the heyday of an essentially late 19th-century model, oriented toward an optimization of quality but operating through highly differentiated sex roles and respect for institutions.

It is very tempting to link the rapid fertility decline after 1965 and the accelerated weakening of the institution of marriage during the 1970's to the rise of new value orientations, and especially to the drift toward "post-materialism". Is there supporting evidence for such a link?

Two sources of information are available for establishing such a connection. The first one is the large "European Values Studies" (EVS) conducted in 9 western European countries during the early 1980's, and the second is a smaller value study held in the Netherlands by a team at the University of Nijmegen (Felling et.al.). The EVS does not allow for a linkage between value orientations and actual behaviour with respect to family formation variables, but contains the Inglehart items and several family attitude items. The team at the University of Tilburg, responsible for the cross-national comparisons in the EVS, was so kind to produce the correlation coefficients between the Inglehart indicators and the family items. These coefficients are presented in Table 4. For ease of interpretation, all family items in this table are worded in such a way that there is a uniform direction (non-conformism). Moreover, all value orientation items are grouped according to their affiliation with the two Inglehart poles. Two measures of protest-proneness and one indicator of distrust toward technical development are added to the "post-materialist" set. The correlation coefficients are all lower than 0.30. This is largely an artefact of using Pearson correlation coefficients with dichotomized or trichotomized variables. Indicators of the same dimension, which would easily correlate at levels of 0.70 or higher if interval measurement were available, now correlate at levels of 0.25 to 0.40 only (e.g. stress on maintenance of order and accentuation of respect for authority have a correlation coefficient of +.26). Hence, coefficients of 0.10 or higher between value orientations and family variables are indicative of a clear association. It is also hazardous to compare the

Table 4 : Associations between Indicators of Materialist/Post-Materialist Value Orientations and Indicators of Non-Conformism with Respect to Family Life in 9 European Countries (European Values Studies, N = 12464).

Indicators of Non-Conformism in Family Life	Materialist Indicators						Post-Materialist Indicators				
	-Stress on maintenance of order	-Stress on inflation control	-Imprisonment = punishment, protection of society, setting of example	-Rightist self-rating	-Defense present society	-More respect required for authority	-Stress on freedom of speech	-More say in government	-Protest proneness: acceptance of petitioning	-Protest proneness: acceptance of wild-cat strike	-Distrust of technological developm.
i. Childbearing no longer element in a woman's vocation;	-0.08	-0.08	-0.03	-0.05	-0.06	-0.06	+0.07	+0.11	+0.10	+0.04	+0.03
ii. Two-parent family not essential for happiness of children;	-0.11	-0.05	-0.02	-0.06	-0.07	-0.12	+0.05	+0.10	+0.07	+0.12	+0.06
iii. Respect for parents is conditional;	-0.11	-0.15	-0.02	-0.06	-0.06	-0.24	+0.14	+0.11	+0.14	+0.15	+0.08
iv. Parents need not sacrifice themselves for their children;	-0.09	-0.07	-0.03	-0.09	-0.05	-0.20	+0.06	+0.10	+0.09	+0.12	+0.06
v. Approval of motherhood for intentionally unmarried women;	-0.16	-0.09	-0.09	-0.21	-0.10	-0.19	+0.11	+0.14	+0.12	+0.20	+0.02
vi. Marriage is old-fashioned institution;	-0.13	-0.06	-0.06	-0.20	-0.12	-0.16	+0.07	+0.09	+0.03	+0.16	+0.01
vii. Tolerance of divorce (10 pt scale);	-0.18	-0.13	-0.09	-0.25	-0.15	-0.24	+0.13	+0.19	+0.20	+0.25	+0.02
viii. Tolerance of extra-marital relations (10 pt scale);	-0.17	-0.09	-0.08	-0.19	-0.15	-0.26	+0.15	+0.13	+0.14	+0.25	+0.03
ix. Less importance of family life would be welcome.	-0.13	-0.08	-0.04	-0.14	-0.12	-0.30	+0.08	+0.10	+0.05	+0.17	+0.10

Source : results kindly made available by L. Halman and F. Heunkx, Katholieke Hogeschool Tilburg; results are weighted by national population sizes for France, UK, Fed. Rep. Germany, Italy, Netherlands, Belgium, Denmark and Spain; field-work was conducted in the period 1979-82.

correlation coefficients of Table 4 because of the impact of the unequal format of categorization of the various variables. Despite these shortcomings, the conclusion based on the directions of the associations is clear: non-conformism with respect to the family is negatively correlated with indicators of "materialism" and positively associated with "post-materialism". All signs are consistent. This confirms our original hypothesis that recent changes in family formation and dissolution are connected with the trend toward assertion of individual rights, rejection of authority and dissatisfaction with the social order of the post-industrial society.

The Nijmegen team (Felling et al., 1983) generated results which shed further light on the association between value orientations and characteristics of social position in the Netherlands. The information is presented in Table 5: the signs indicate the direction of the associations and eta-coefficients measure their strength. Firstly, their findings indicate once more that familism tends to be associated with a higher weight given to economic advancement and security (i.e. a typical "materialist" feature) and also with a higher priority given to altruism. These three dimensions are more frequently stressed by persons with a higher degree of religious involvement, with right-wing political convictions, who are older, tend to have lower levels of education and lower status professions. Conversely, younger persons, highly secularized, left-wing, highly educated and persons belonging to higher status occupations opt more systematically for the other three value orientations, namely social egalitarianism with dissatisfaction about the present social order, a carpe diem orientation and a preoccupation with inner harmony. The latter three orientations are obviously overlapping with Inglehart's "post-materialism", and confirm that "post-materialism" is (i) not associated with familism, and (ii) that non-familial and "post-materialist" orientations originate among an intellectual elite and younger cohorts.

An indirect link with actual family formation behaviour can be established through data from the Dutch family-survey of 1982 (CBS, "Onderzoek Gezinsvorming", 1984). The linkage with the value study of Felling et al can be made because both data sources publish results by political party preference. This variable is not only a common covariate in demographic and value research, but it also provides an important social variable in

Table 5 : Value orientations and Social Position in the Netherlands, 1979 : Direction and Strength of Relationships (=eta)

Social Position (no. of categories)	Value Orientations					
	Familism	Economic Advancement & Security	Altruism & Solidarity	Social Egalitarianism	Inner Harmony	Hedonism
Religious Involvement (6) (Low → High) N = 1005	+	(ns)	+	-	(ns)	-
	(eta = .25)		(.17)	(.19)		(.22)
Political Preference (6) (Left → Right) N = 961	+	+	(ns)	-	no linear pattern	-
	(.32)	(.23)		(.44)	(.15)	(.21)
Sex (2) (Male) N = 1005	(ns)	(ns)	(ns)	(ns)	-	(ns)
Age (5) (Young → Old) N = 1005	+	(ns)	+	(ns)	(ns)	-
	(.24)		(.19)			(.20)
Education (7) (Low → High) N = 1005	-	-	(ns)	(ns)	+	(ns)
	(.33)	(.28)			(.20)	
Occupation (6) (Low Status → High) N = 650	-	-	(ns)	+	+	(ns)
	(.16)	(.24)		(.17)	(.21)	

Notes : Items for each value orientation are :

- Familism : being married, having and educating children, living for one's family
- Economic advance & security : exercising one's profession, financial prosperity, social security, advancing socially.
- Altruism & Solidarity : readiness to assist others, helping people in difficulty, being a good person, showing of understanding, perpetuating happiness, being tolerant and just, contributing to more human society
- Social egalitarianism : contributing to reduction of income inequality, promoting of social justice, altering of existing power relations
- Inner harmony : enjoying quiet moments, living in harmony with oneself, being open for the world, living at highest level of consciousness
- Hedonism : enjoying life, making fun, seeking new experiences, freedom of choice.

Categories for position variables are :

- Religious involvement : second generation without affiliation, first generations without affiliation, ex-church members, marginal members, modal members, core members
- Political preference : small right-wing parties, Liberal-Conservative, Christian Democrat, D66 or Liberal reformist, Labour, small left-wing parties
- Age : 18-29 and 10-year age groups till 70; Education : 7 levels in various types of schools in the Dutch system.
- Profession : Unskilled, skilled manual, small independants, lower white collar, middle-level white collar, professional and managerial; persons without profession are omitted

Source : A. Felling, J. Peters, O. Schreuder (1983) : Burgerlijk en Onburgerlijk Nederland, various tables, pp.145-177.

its own right. This holds particularly for the Netherlands because of the broad spectrum of Dutch parties and because party preference captures the dimensions "left-right", "establishment versus anti-establishment" and secularization. All information is brought together in Table 6.

Panel A of the table contains data on cohabitation, contraception and fertility by party preference, and panel B gives the scores on the same six value orientations defined in Table 5, also by voting pattern. From the data in panel B we have constructed a summary index for each party as follows: familism, economic advancement and altruism-scores are averaged since they are more traditionalist orientations, and the same is done for egalitarianism, hedonism and inner harmony since they are the newly emerging "post-materialist" preoccupations. A difference between these two sets of averages is also established (see last three columns in panel B of Table 6). This difference-score measures the preponderance of the three more traditionalist orientations over the three more "post-materialists" ones(6), and provides a continuum for locating the groups according to party preference. The results from the demographic survey can now be plotted against the value-orientation difference-scores, as done in Figure 2 for the current incidence of cohabitation (women aged 23-27) and average parity (women aged 28-32). The features in Figure 2 are quite revealing. Firstly, there is almost a linear relationship between current cohabitation and the value-orientation difference-index, with cohabitation increasing monotonically as preference for the three non-traditionalist dimensions outweighs that for the three traditionalist ones. Average parity by age 28-32 shows the reverse pattern, plus a strong additional effect of preference for a party with a religious affiliation. This additional boost toward higher fertility at the right side of Figure 2 is also present for older women, but in an attenuated fashion(7). Nevertheless, the linear pattern on the secularized side (Liberal and Left) indicates that shifts in value orientation within the secular order also produce the expected effect. Consequently, we are at present witnessing the joint effects of secularization and of Wertwandel toward "post-materialism", resulting in an unfolding of highly contrasted patterns of family formation. If high religiosity can be viewed as a form of "pre-materialist" orientation(8), the data of Figure 2 would give a fair representation of what happens with reproduction as one moves from "pre-materialism" to "materialism" and finally to "post-materialism".

Table 6 : Political Preference, Family Formation Characteristics and Value Orientations in the Netherlands, + 1980

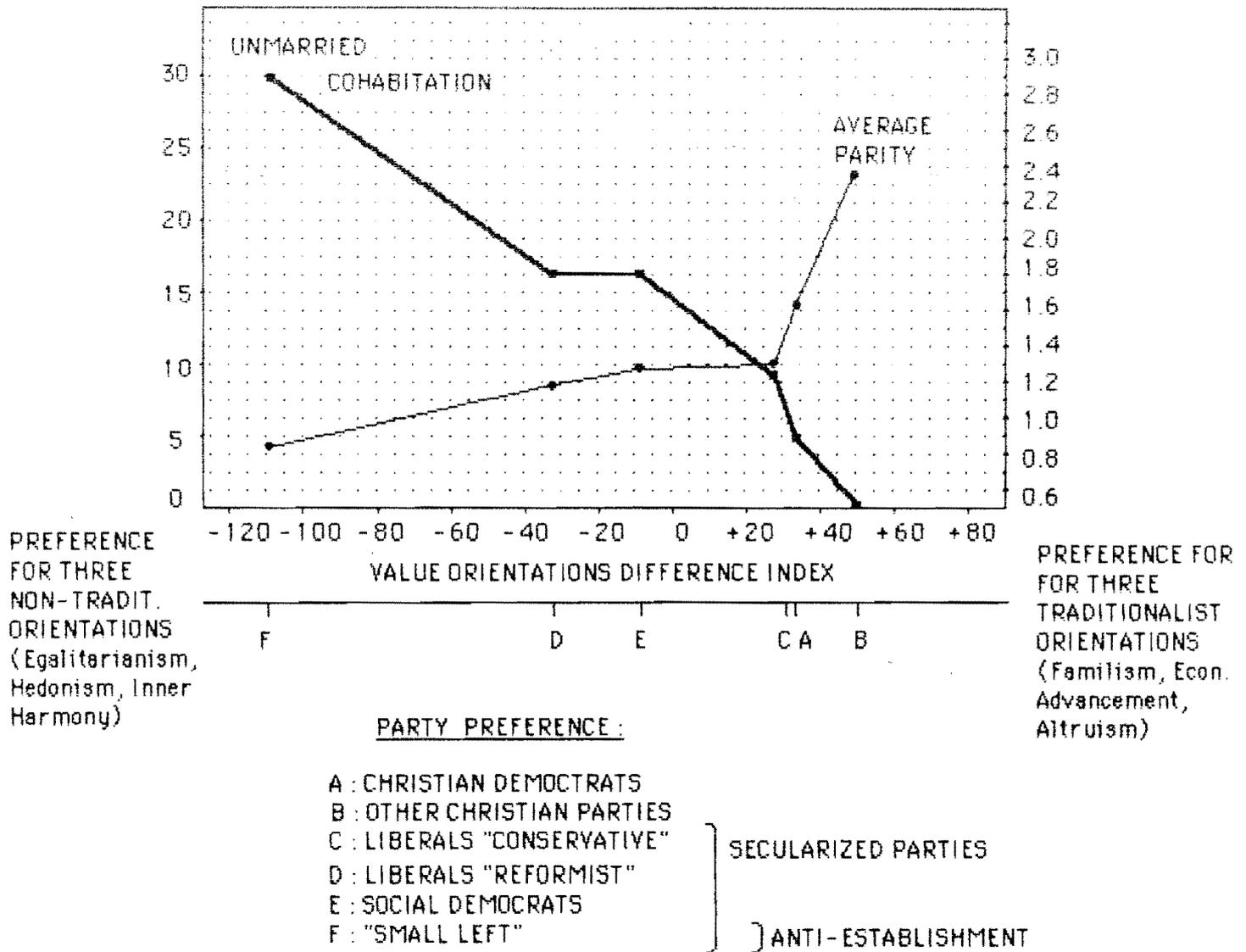
<u>Panel A : family formation characteristics, 1982-survey</u>									
<u>Political Preference</u>	<u>percent currently cohabiting, age</u>		<u>percent curr. in union never practiced contracept. age 18-27</u>	<u>average parity</u>		<u>average expected family size, age :</u>			
	<u>18-22</u>	<u>23-27</u>		<u>age 28-32</u>	<u>33-37</u>	<u>23-27</u>	<u>28-32</u>	<u>33-37</u>	
<u>1. Christian parties</u>									
-Christian democrats (CDA)	4	5	} 10	1.62	1.98	2.39	2.32	2.18	
-Other (SGV, GPV, RPF) (a)	0	0		2.35	2.87	3.43	3.45	3.39	
<u>2. Liberal Parties</u>									
-Liberal-conservative (VVD)	11	9	3	1.29	1.80	2.06	2.03	2.02	
-Liberal-reformist (D66)	7	16	1	1.19	1.66	1.88	2.03	1.83	
<u>3. Leftist parties</u>									
-Social democrats (PvdA)	11	16	} 2	1.28	1.72	1.93	1.91	1.86	
-"Small left" (PPR, PSP, CNP)	15	30		0.85	1.76	1.56	1.66	1.96	
<u>Total</u>	9	14	4	1.35	1.84	2.00	2.04	2.03	
<u>N</u>	1721	1696	1623	1603	1641	1696	1603	1641	
<u>Panel B : Value orientations, survey 1979</u>									
	<u>Familism</u>	<u>Econ. Advancem. &amp; Security</u>	<u>Altruism &amp; Solidarity</u>	<u>Social Egalitarianism</u>	<u>Inner Harmony</u>	<u>Hedonism</u>	<u>Average first 3</u>	<u>Average last 3</u>	<u>Difference first 3-last 3</u>
<u>1. Christian parties</u>									
-Christian democrats	525	497	511	479	499	475	511	484	+27
-Other	514	497	500	420	505	452	504	459	+45
<u>2. Liberal Parties</u>									
-Lib.-conservatives	506	531	509	446	509	518	515	491	+24
-Lib-reformists	485	468	498	508	530	506	483	515	-32
<u>3. Leftist parties</u>									
- Social democrats	500	513	498	546	482	508	504	512	-8
-"Small left"	390	442	468	593	515	532	433	547	-114
<u>Total</u>	500	500	500	500	500	500			
<u>N</u>	961	961	961	961	961	961			

Note : (a) actually Protestant fundamentalist and right wing

Sources : Panel A : CBS, 1984, various tables; panel B : Felling et al, 1983, p. 152.

PER CENT  
WOMEN 23-27  
COHABITING

AVERAGE PARITY  
WOMEN 28-32



**FIGURE 2: RELATIONSHIP BETWEEN VALUE ORIENTATIONS AND TWO INDICATORS OF FAMILY FORMATION BY POLITICAL PARTY PREFERENCE IN THE NETHERLANDS 1979-82**

SOURCE: SEE TABLE 6

The basic conclusions to be drawn from studies that link family formation to ideational variables are:

- (i) Western societies have been facing a long historical trend from "pre-materialist" to "post-materialist" value orientations, characterized by periods of faster and slower evolution, but basically without periods of trend reversal (the period 1940-55 may be an exception);
- (ii) During the transition from "pre-materialist" to "materialist" orientation (i.e. during the process of secularization), changes in family formation affected predominantly marital fertility and patterns of contraception;
- (iii) During the transition from "materialist" to "post-materialist" orientation (i.e. the growth of self-fulfillment), there was a further drop in fertility to sub-replacement levels, and a growing disregard for social institutions (e.g. church, family, law, nation-state);
- (iv) The shift in value orientations has definite roots in economic growth, peace and continued prosperity (cf. Maslow's need-hierarchy of motivation) or with the emergence of new symbols in social stratification. There are, however, also connections with dissatisfaction with or even alienation from the emerging technical and economic order of the "post-industrial society";
- (v) Cross-sectional as well as cohort variation in patterns of family formation follow in the wake of shifts in value orientations;
- (vi) Younger cohorts and secondary elites have provided the dynamics of the shift toward "post-materialism";
- (vii) Given the pluralist nature of Western capitalist societies, the increasing skepticism toward legitimacy and efficiency of policy interventions by the state, and the presence of a firm and long historical trend in ideational components, it will be very difficult to redirect trends in family formation without coercive measures.

This will hold particularly in a population that is closed to migration and which fails to recruit new members with "older" value orientations.

5. Toward a confrontation between value orientations and demographic requirements?

A recurrent theme throughout the entire history of political philosophy is the presence or absence of congruence between individual and public interests. What is good and rational for the individual is not necessarily good and rational for the aggregate. Moreover, what is good for the current generation is not necessarily good for the next generation. The demographic issues treated here are examples of such a juxtaposition: individual goal orientations supportive of less familism and of continued sub-replacement fertility may not be reconcilable with appropriate socialization of the new generations and the maintenance of at least a stationary population required, according to many, for assuring economic and social stability. However, not everyone is of the opinion that such a confrontation exists or is in the making.

An important current of thought, for instance, considers population growth within the framework of historical periods, each being characterized by a dominant mode of production. Hunter-gatherer, nomadic or peasant societies have stringent limits on population growth set by the Malthusian trap. Industrializing societies, by contrast, can absorb population growth and may even require it. In post-industrial societies, technological advances would be labour-saving to the extent that a net surplus of labour/time is generated. Current high unemployment in Western Europe is viewed as symptomatic of rapid labour-saving technological innovations being introduced at times of high supply of manpower (concentration of the population in the active age range, arrival of the post-war baby boom, entry of women into the formal labour force). According to this view, a slowly diminishing population could be a blessing, and the post-industrial society would inaugurate a period of gradual demographic evolution towards a lower population size equilibrium. Post-materialist value orientations could furthermore flourish in such a setting: excess man-hours can be converted into time available for self-fulfillment (leisure, arts, retraining), and the traditional life cycle (schooling, work, retirement)

would make room for far more flexible and interesting patterns for both young and old. In addition, the ecology movement is convinced of the fact that a smaller population would be less polluting. Finally, if a temporary labour shortage arises, the old valve of "guestworkers" can be opened as there is no shortage of supply of manpower from the LDC's. In other words, what are these conservative demographers worried about?

The classic causes for worry among demographers have been aging associated with lower fertility combined with the marked J-shaped age profile of social expenditure, the declining productivity of an older population and falling demand for goods in a population with negative growth. These arguments have not convinced many economists and planners, nor have they had much impact on public opinion(9).

Firstly, most Western societies have already had their first wave of aging (associated with the marital fertility transition of 1880-1930), and will not face the next wave (linked to the development of sub-replacement fertility since the 1970's) for another four decades. Secondly, if social security ran into problems during the 1970's, much of it was to blame on flagging economic growth and unemployment. According to the OECD, for instance, much of the 8 per cent average annual increase in real social expenditure in seven major member countries during the period 1960-75 was due to the extension of coverage and to a rise in levels of benefits, not to demographic factors such as aging (see Table 7). When the average growth rate in real social expenditure fell to 4.2 per cent in the period 1975-81, the relative share of the demographic component remained virtually constant at less than a fifth of total real growth. Moreover, if it were not for youth-unemployment and earlier retirement of persons aged 50-65 caused by the depression and the disappearance of obsolete industries, the demographic share would have been much smaller still (in 1975-81, the demographic factor had its major effect through the factor "unemployment" rather than through "health" or "pensions"; see Table 7). The issue of productivity declining with age is harder to assess: most statistics are based on wage profiles by age and these give a distorted impression because of the seniority bias. An elimination of this bias would probably result in a marked negative link between productivity and age from about 35-40 years of age onward. The vintage approach to human capital also supports such a negative link, especially in times of rapid technical progress.

Table 7 : Social Expenditure and its Components in 7 Major OECD-countries, 1960-1990

Sector	Social Exp. as % GDP 1960	Annual Increase in Real Soc. Exp. 1960-75	Increase in Real Soc. Exp. 1960-75 due to :		
			Change in Demographic Profiles	Change in Coverage	Change in Real Benefit Levels
Education	4.2	6.1%	0.3	1.9	3.8
Health	2.7	9.6	1.0	0.6	7.8
Pensions	4.5	8.4	2.2	1.6	4.4
Unemployment Insurance	0.4	12.0	5.1	0.0	6.6
Family Allowance & Other	2.5	8.2	n.a.	n.a.	n.a.
Total	14.3	8.0	1.4	1.4	5.0
	<u>1975</u>	<u>1975-81</u>	<u>1975-81</u>		
Education	5.1	1.8	-1.7	0.2	3.4
Health	5.1	3.1	0.3	0.0	3.1
Pensions	7.3	6.6	1.8	0.8	3.9
Unemployment Insurance	1.1	6.4	7.8	-2.3	1.0
Family Allowance & Other	3.4	3.4	n.a.	n.a.	n.a.
Total	22.0	4.2	0.8	0.2	3.2
	<u>1982</u>	<u>1982-90</u>	<u>1982-90</u>		
Optimistic Scenario					
GDP-growth = 3.7%	24.0	3.2	0.2	0.0	3.0
Pessimistic Scenario					
GDP-growth = 2.8%	24.0	2.3	0.6	0.0	1.7

Source : OECD, Manpower and Social Affairs Committee.

Note : Scenarios assume real cost increase in health and education sectors of 1% p.a. and no expansion of coverage.

However, young cohorts are by no means homogeneous and a portion of them may have been seriously affected by deteriorating standards of secondary education and by alienation toward the "materialist" value orientations required in a competitive capitalist setting. Research with respect to the heterogeneity of the new vintages is therefore urgently required. Finally, the Keynesian fear of demand falling as population growth slows has not materialized in conditions of growing disposable income. Here again, the economic factor by far outweighs the demographic one.

There is a long list of counter-arguments. Firstly, economic and demographic factors are not independent: if economic growth declines, demographic shifts automatically become more important. If GDP-growth averages only 2.8 per cent instead of 3.7 per cent for the period 1982-90, demographic changes in the eighties would account for 26 per cent of total real growth in social expenditure according to the OECD projection, against 6 per cent in the instance of faster economic growth (see Table 7). In other words, continued sub-replacement fertility does not automatically lead to a breakdown of a major instrument in the welfare state(10), but constitutes nevertheless a major hazard factor in times of slow economic expansion. This holds particularly for the next 2 generations who will witness the second aging boom from 2015 onward (earlier in Japan) which will increase the share of population over 65 from about 13-16 per cent to 20-25 per cent, and who will be fully affected by the negative aspects of the cross-sectional organization of social security ("pay as you go") in Western Europe (e.g. Keyfitz, 1984).

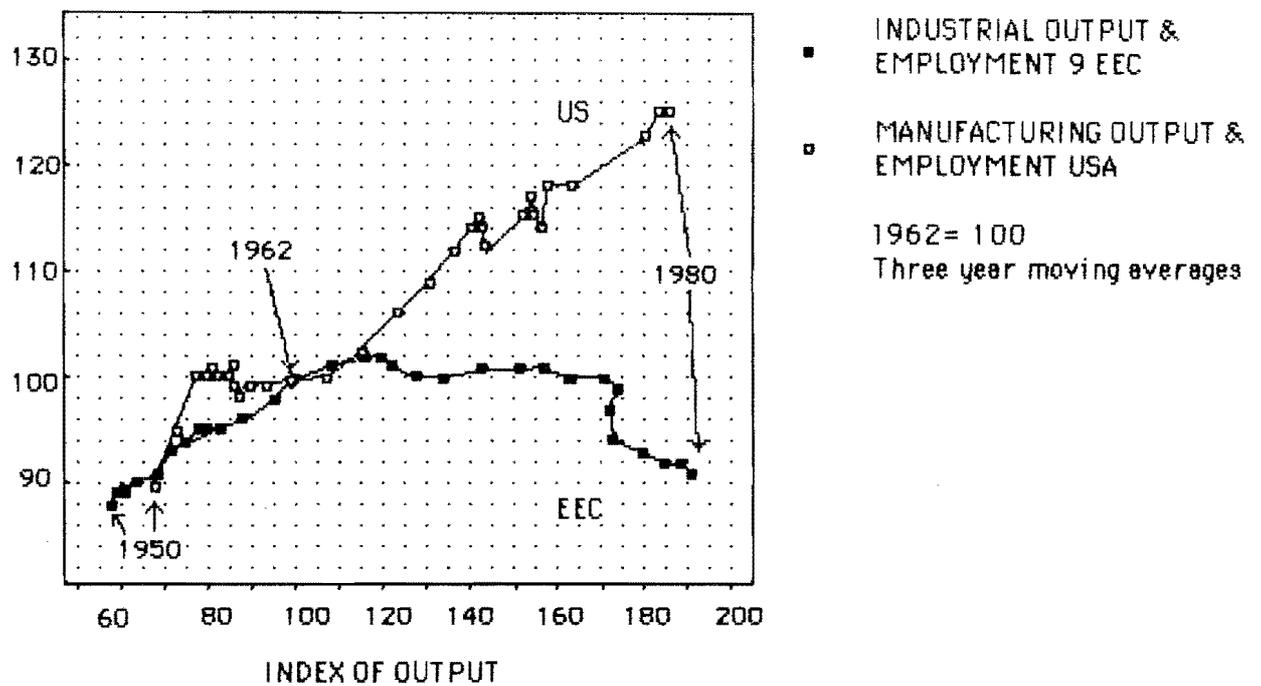
Secondly, capitalist economies stand in fierce competition with each other. The EEC-countries, for instance, lack natural resources and must rely heavily on "grey matter" and technology to maintain their current position. Hence, what they continue to need is a steady flow of high quality labour, and not the palliative of a shrinking one. Such labour cannot be provided by another "guestworker" approach, but only through improvement of local educational standards, a balanced mix of "materialist" and "post-materialist" motivations, more selective immigration coupled to full integration of migrants and their offspring. If European economic growth falters and if "materialists" are discouraged by too much "post-materialism", the chances are that emigration to more successful competitors will gain the upper hand, thereby accelerating negative

demographic growth and eliminating valuable sources of manpower. If there is anything that strongly differentiates the US from Western Europe, it is the former's capacity to attract and integrate large numbers of migrants with "materialist" value orientations and strong motivation for upward mobility. When illegal immigration is taken into account, the US presumably receives at present a historical record of about one million immigrants per year, against zero for the EEC.

Thirdly, it is not clear whether technological progress leads to a temporary or to a long term labour surplus. It is generally argued that process-innovation has a direct negative influence on employment in the short run, but there may be a hidden positive effect: without process-innovation certain industries (e.g. textiles) would have fled entirely to lower-wage economies, whereas a complete technical overhaul has managed to (i) keep or re-establish a part of such employment in the West, and (ii) boost productivity considerably. Aside from process-innovation with a labour-saving orientation, product innovation tends to have a positive effect on employment. Differential response to the technological challenge is likely to produce continued demand for labour in the most competitive economies and a surplus of manpower in the ones that lag behind. On this point, we already possess the record of a striking difference between the American and European economies: as can be seen from Figure 3, European industrial employment has stagnated since 1962 and shrunk since 1973 while output grew, whereas in the US both output and employment in manufacturing have continued to expand. Hence, the industrial reconversion in Europe has rather dramatic consequences for employment. A corollary of this feature is that Europeans are drafting a steady stream of blueprints for redistributing jobs and/or shortening working time. Job redistribution and shortening of working time are not issues in the US.

Fourthly, it is not at all clear that the best solution to the ecological hazards consists of scaling down output, of reverting to domestic production and encouraging negative population growth. The alternative view suggests that there are feasible technological solutions for preventing ecological hazards and for cleaning up the mess. Their implementation depends in essence on the political will and on the availability of means, i.e. more economic growth.

INDEX OF EMPLOYMENT



**FIGURE 3 : INDICES OF OUTPUT AND EMPLOYMENT IN THE SECONDARY SECTORS OF THE US AND 9 EEC COUNTRIES, 1950-80.**

SOURCE : DATA FROM FREEMAN, CLARK AND SOETE.

Fifthly, a contradiction can be noted between a striving for higher quality of life or for more grass-root democracy and de-institutionalization (see, for instance, Sennett, 1974; Berger and Berger, 1983). In the words of the Bergers:

"Delegitimation has gone too far, in both the private and public spheres. The family did not assert its moral authority. Education could not fill the gap, but could only serve as a credentialing machine, without the capacity to provide moral guidance. Young people - disillusioned both in their private lives and by public institutions in the political and economic sector primarily - appear more at bay than ever before in the history of modern Western societies" (p.181).

Hence, self-fulfillment and de-institutionalization have considerable costs, both for the individual (e.g. disorientation, loneliness, anomy) and for the aggregate (readiness for totalitarian revivals, diminishing public involvement, increased insecurity, high costs of substitutes for family functions). In this sense, it is at least theoretically possible that the "limits to self-fulfillment" will be discovered, just like the "limits to growth".

To sum up, "post-industrial" societies are currently in turmoil with respect to the delimitation of their priorities. "Materialist" and "post-materialist" goal-competition is fully emerging in the political arena and this is likely to have a bearing on the economic and demographic future of these societies. Moreover, it is not at all evident that they will all ultimately opt for a similar direction. Post-industrial demographic regimes may vary accordingly.

#### 6. Toward a differential patterning of post-industrial demography?

Current thought about the demographic future for the West distinguishes essentially three scenarios. The first is the "Untergang des Abendlandes" and holds that a demographic implosion will cause the end of Western civilization. This thought is inspired by the notion that cultures are distinct entities with a given life-span. Older civilizations are overrun

by new ones and the demographic factor plays a critical role in this struggle for "Lebensraum". The second scenario proposes that there are self-regulating mechanisms of an institutional or economic nature. The outcome is oscillating fertility. These "pendulum"-theories leave room for a demographic revival, either as a result of economic swings or as a consequence of adequate incentives and policies. The third scenario is of the "black hole" type: established and wealthier segments of the population tend to more hedonistic life styles or to more "post-materialism" and concurrently to low fertility, but they allow the recruitment of new members from other cultures and regions, thereby creating a multi-ethnic and pluralistic society. Population levels are sustained through migration waves and through the temporary above-replacement level fertility of immigrants. As these groups in their turn are drawn into the "black hole", room is made for a new wave and further cultural synthesis is set in motion.

The first view was certainly fashionable during the first half of this century and not only in Germany. It loathes immigration as "Ueberfremdung", rejects integration as "degeneration" and proposes pro-natalism as a key factor in the protection of "Lebensraum". It has not disappeared in 1945, but still emerges publicly in Europe in times of economic depression, drawing on a latent xenophobic substratum(11). It is primarily associated with right-wing political preference and also with a "materialist" value orientation: foreigners threaten security and provide unwanted economic competition.

The second theory draws support from western historical demography in the sense that it expects autoregulation and population swings. It also fits within the framework of economic and historical theories that recognize long term cycles. However, contemporary efforts to seek sources for demographic autoregulation are rare. One theory that comes close to it, namely Easterlin's linkages between intergenerational income ratio's and fertility and between cohort sizes and such income ratio's, is being discarded. Easterlin went certainly one step too far (linkage between cohort sizes and intergenerational income ratio's) and could of course not forecast the change in value orientation and the de-institutionalization of the family. Hence, to bring about an upturn in fertility, we must look either in the direction of much more formidable policy interventions of a

financial nature or in the direction of a re-orientation of the value system itself (i.e. toward "the limits of self-fulfillment"). Personally, I am skeptical toward both: the trend to "post-materialist value" orientations seems firmly set and I fear that incentives of a financial nature (i.e. falling short of coercive measures affecting availability of contraception) cannot redirect the trend. From information available at present, the upturn in fertility does not seem imminent.

The third model has most notably been in operation in the US: marital fertility started a gradual decline as early as 1800, but waves of immigration associated with economic booms in the US and/or political and economic crises elsewhere have provided a substantial supply. The growth of an integrated pluri-ethnic society, singled out by Parsons as the most advanced form of society so far, shows all signs of viability in the US. Furthermore, it provides a plausible pattern for a post-industrial demographic regime that supports a competitive economy, and therefore exerts the high degree of attraction required for its continuity. Of course, migration is even more susceptible to swings than fertility, and an economic or financial crash in the US could bring a swift end to the current immigration wave. But, in contrast with the model that concentrates on redirecting the fertility trend, the migration stream is largely unaffected by the secular trend in value orientations. A valuable feature of the migration model is, furthermore, that it ensures a balanced mix of "materialist" and "post-materialist" orientations in the receiving country.

If fertility is difficult to re-direct and if no self-correcting trend reversal in reproduction occurs, the demographic viability of post-industrial societies seems to be intimately linked with their prospect of attracting and integrating migrants. Capitalist societies are not on the same footing with respect to this capacity. Western Europe and Japan are at a considerable disadvantage compared with the US.

What happens when both forms of recruitment, i.e. fertility and immigration, fail? The outcome is simple: negative growth in a closed population leads to no population, no society and no economy at all. Hence, labour-saving technology, even if accompanied by increased output, rising standards of living and more room for self-fulfillment, is no viable

alternative in the long run. At one point, fertility must come back to replacement level and/or the migration valve must be opened again. There is no way of running away from the dilemma of today. In the meantime, in what economic state will the populations be that tend to stationarity at three-quarters or half their current size, compared to those who have kept immigration going? That is what some Western European demographers currently worry about.

## 7. Conclusions

We have tried to show that there is a long historical record of covariation in changes and innovations with respect to family formation and value orientations at large. The secularization-hypothesis most probably finds its extension in the drift toward "post-materialism". Economic growth and peace are considered as major driving forces of such ideational changes, but a model of one-way causation is highly inadequate. Furthermore, the direction of Wertwandel is influenced by dissatisfaction with the political and institutional fabric of our societies, and this form of alienation has affected all institutions, and not just the family alone. At present, it seems that "de-institutionalization (or "de-legitimation" as the Bergers call it) has not as yet come to a stop. By extension, the end of sub-replacement fertility is not on the horizon either.

The demographic consequences of sub-replacement fertility are likely to be differentiated in capitalist societies, depending on their capacities to switch to the other form of demographic recruitment, namely immigration. In the US, employment has not faltered seriously so far and the American economy is at present absorbing record numbers of immigrants, thereby continuing its path toward an integrated multi-ethnic society. Such immigration presumably helps to maintain a healthy mix of "materialist" and "post-materialist" goals. In Western Europe, by contrast, both forms of demographic recruitment are in the doldrums.

We are of course facing a large number of unknowns. With respect to value orientations, for instance, we do not know whether the pattern along which the various constituting dimensions are folded into Inglehart's scale has any long term stability. For instance, "familism" could drift away from its current association with the "materialist" orientation and move in the

direction of an association with "post-materialism". Who can foresee such a historical restructuring of goal-patterning? Another major caveat pertains to the outcome of the technological revolution with respect to demand for labour. If the picture of European employment during the 1970's mirrors this continent's necessary industrial overhaul, such a restructuring may lay the foundations for a trend reversal in labour demand. But, the stronger the drift toward the current components of the "post-materialist" configuration, the more this drift is fuelled by alienation or by the negative aspects of the new technical and political order of the post-industrial society, and the longer employment stagnation lasts in Europe, the wider the gap is likely to become between the two Atlantic societies, and the dimmer the European future. In other words, I am utterly unconvinced of the fact that there could be compatibility, even for a few decades only, between European economic viability in a competing world and a deficiency of overall demographic recruitment.

## Footnotes

- (1) The 1974-81 panel correlations of the Rokeach items are reported by Inglehart (1985, p.109). Inglehart's "materialist" versus "post-materialist" orientation has a stability index of .39 and ranks fifth in this respect out of a total of 19 orientations (maximum=.68, minimum=.26).
  
- (2) For the US see W. Leasure (1982) and for the West in general also Bolton and Leasure (1979). These authors conclude that the decline in fertility was always accompanied by a questioning of religious and political institutions (1982, p.607). Leasure does not measure secularization directly, but uses the regional importance of 5 Protestant groups instead. These groups (Congregationalists, Presbyterian, Quaker, Unitarian and Universalist) are taken for their strong orientation toward individual emancipation, lack of dogma and hierarchy (1982, p.617). Of the 5 predictors used (also included are per cent in agriculture, illiteracy, sex ratio and the change in the adult/farm ratio), the religious one has the highest prediction power with respect to the changes in child/woman ratios between 1800 and 1860 for the original 24 territories.
  
- (3) More recent analyses with US data that make a distinction according to religious practice of Catholics refute the Westoff and Jones hypothesis (see W.D. Mosher and G.E. Hendershot, 1984 and J. Blake, 1984). For a general discussion of family changes and religion in the US, see Thornton, 1985.
  
- (4) The twelve items to be ranked are:
  - Maintain order in the nation (Materialist)
  - Make sure that the country has strong defence forces (M)
  - Fight against crime (M)
  - Fight rising prices (M)
  - Maintain a stable economy (M)
  - Maintain a high rate of economic growth (M)
  - Try to make our cities and countryside more beautiful (undiscriminating)
  - Move toward a friendlier, less impersonal society (Post-materialist)

- Move toward a society where ideas count more than money (P-M)
- Give people more say in how things are decided at work and in their community (P-M)
- Protect freedom of speech (P-M)
- Give people more say in the decisions of the government (P-M).

- (5) Inglehart bases his assertion on a single "materialist" item, namely the teaching of the value of money to children. However, cohort differences in the response patterns are very substantial and entirely in the expected direction (see Inglehart, 1982, p.465).
- (6) The drawback of such a summary is of course that a given difference may result from a neutral position on the first set and aversion to the second, from a slight preference on either side or from a strong aversion on the first matched by a neutral position on the second. It is therefore advisable not to lose track of the scores on the 6 dimensions individually.
- (7) One would obviously need a cohort analysis of fertility with party preference or secularization as a covariate to discern whether the attenuation of this "boost" is a life-time or a cohort effect. From Belgian data that take secularization into account (Wijewickrema, 1985) there is evidence that goes in the direction of a strong cohort effect with regularly practicing Catholics becoming more and more of a special group. Continuing secularization seems to produce an ongoing selection effect. This is one of the reasons why there may have been an apparent end to overall "Catholic fertility" but not an end to higher fertility among practicing Catholics (or practicing members of any other denomination).
- (8) In his debate with Flanagan concerning the findings of the "Japanese Character"-studies, Inglehart (1982) proposes that respect for religious rites and traditional authority can be interpreted as "pre-materialist". In Japan, the transitions from "pre-materialist" to "materialist" and from "materialist" to "post-materialist" are concentrated in a much shorter time period than in the West, and are therefore largely overlapping. This would account for the greater degree of multi-dimensionality of value orientations in Japan.

(9) Some figures from public opinion polls on the demographic issue are of interest. The figures presented below are for a sample of the Flemish public in Belgium aged 21-65 (Dooghe et al., 1974 and 1981) but they can be taken as fairly typical for much of Western Europe (France, Germany, Switzerland, Austria). In 1973, only 16 per cent thought that a further population increase was beneficial against 63 per cent who wanted a status quo, 8 per cent who wanted a decline and 13 per cent without opinion. Strikingly, economic reasons were advanced most commonly in justifying the response, both among the minority who wanted demographic growth and the majority who did not. Among the former it was believed that population growth stimulates economic activity and creates jobs and prosperity (31 per cent), and among the latter, demographic growth was seen as a threat to employment (34 per cent) or to the economy in general (another 12 per cent). Among the proponents of growth, the preoccupation with aging came second (22 per cent) and among the opponents, preoccupations with crowding and overpopulation (29 per cent) and shortage of space (another 10 per cent) were cited. The 1973 survey, held before the depression was really felt, also showed a higher proportion of proponents of demographic growth among university graduates (35 per cent) than among the less educated (primary: 14 per cent, and partial secondary: 16 per cent). The 1980 survey, held when the economic crisis was evident, confirmed most of these results: 54 per cent thought that the fertility decline to a sub-replacement level was a favourable event and 71 per cent objected to the prospect of government intervention to redirect the trend. Again, persons with education beyond full secondary, regularly practicing Catholics and persons with a political preference to the right had lower percentages, but in none of the categories was there a majority in favour of pro-natalist government intervention. Among the EEC-countries, public opinion seems particularly hostile toward population growth in the Netherlands. In most of these countries the modal response is a preference for a status quo, but in the Netherlands, the modal response is in favour of a population reduction. In the 1981-82 survey involving 5000 respondents in and around the city of Leiden, for instance, 65 per cent opted for a diminishing population size. Marked profiles by age and political preference were also found. Among respondents below 30, 71

per cent favoured a population decrease against 56 per cent among persons aged 60+. Voters for Christian Democrats or other Christian parties approved of declining population with 56 and 58 per cent respectively, against 76 per cent among voters for the "Small Left". (Leeuw and Kreft, 1983, p.239).

- (10) In 1981, social expenditure accounted for a quarter to more than a third of GDP in Western European countries, against a fifth in Canada, the US, New Zealand and Australia. In Japan, the figure was only 17.5 per cent, but social expenditure was growing at the rate of 9 per cent p.a. in the period 1975-81 (against 1 to 5 per cent elsewhere) and hence catching up rapidly.
- (11) For instance, attitude scales measuring sentiment toward foreigners in Belgium show that such a xenophobic substratum covers no less than a third of the public aged between 21 and 65. Repeated measurement over time furthermore indicated that the size of this substratum over the last two decades, i.e. spanning periods of both rapid and slow economic growth, is virtually constant (see Dooghe et al., 1974 and 1981). In these Belgian surveys, xenophobia was measured through two items, namely "foreigners are undesired elements" and "I do not want foreigners as neighbours". Another third is not exactly friendly to newcomers either, and would only allow them in times of labour shortage or for doing work deserted by nationals. However, marked differentials exist by education, political preference and religiosity: xenophobia is least pronounced among the better educated, higher social strata (except self-employed), center or left-wing voters and highly secularized individuals. From these profiles it seems that there is a negative correlation between xenophobia and "post-materialist" value orientations.

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Table 1 : Pattern of First Union Entry for Flemish Women; Estimates of Percentages going Directly into Marriage or via Cohabitation by Age 35, Experience of the 1970's and up to 1982.

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	<u>% Directly into Marriage</u>	<u>% First via Cohabitation</u>
Primary Educ., Regular Church Attendance	99	0
Post-secondary, Regular Church Attendance	98	1
Primary, Irregular Church Attendance	92	6
Post-secondary, Irregular Church Attendance	85	13
Primary, No Church Affiliation	87	9
Post-secondary, No Church Affiliation	71	26
Primary, Freethinker	78	21
Post-secondary, Freethinker	52	44

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Source : P. Willems & C. Vanderhoeft (1985) "Alleenwonen, samenwonen, huwen en scheiden", forthcoming in Bevolking en Gezin, Brussels.

Note : Estimates are based on an education-stratified proportional hazard model with two competing risks. Data are from the NEGO 4-survey, 1982-83 (N = 2520).

Table 2 : "Materialist" versus "Post-Materialist" Values by Occupation and Age Group in 9 EEC countries, 1976-79 Surveys Combined

Occupation	Age LT 35 (N=19929)			Age 35-49 (N=12781)			Age 50+ (N=18087)		
	% Mat. (1)	% Post-Mat. (2)	(2)-(1)	% Mat. (1)	% Post-Mat. (2)	(2)-(1)	% Mat. (1)	% Post-Mat. (2)	(2)-(1)
Top management, top civil service	20	30	+10	22	22	0	28	16	-12
Students	20	25	+ 5	-	-	-	-	-	-
Professionals	25	21	- 4	21	19	- 2	29	12	-17
Non-manual employees	26	18	- 8	34	13	-21	38	9	-29
Unemployed	24	16	- 8	38	9	-29	48	6	-42
Self-employed business persons	35	13	-22	41	10	-31	43	7	-36
Manual workers	32	11	-21	40	8	-32	44	5	-39
Housewives	38	9	-29	46	6	-40	50	5	-45
Farmers	42	10	-32	44	5	-39	48	4	-44
Retired persons	-	-	-	-	-	-	51	5	-49

Source : R. Inglehart (1981) : Post-Materialism in an Environment of Insecurity, American Political Science Review, p. 893;

Data from Euro-Barometers.

Table 3 : Value Orientation Priorities in the West and Japan, 1974-76

Item	Percentage of Respondents Selecting Item as 1st or 2nd Priority in :				
	More Materialist Western European Country (type : F.R. Germany)	More Post-Mater. Western European Country (type : Netherlands)	USA	JAPAN	
Mat. {	Stable economy	74	31	52	59
	Fight against crime	47	48	42	20
	Economic growth	22	14	15	9
	Strong defence forces	8	5	32	5
		151	98	141	93
Beautiful Cities and Countryside	8	13	6	36	
Post-Mat. {	More say on job	17	34	21	12
	Friendlier, less impersonal society	13	29	11	37
	Society where ideas count	11	26	21	22
		41	89	53	71
Total	200	200	200	200	

Source : R. Inglehart (1981) : "Changing Values in Japan and the West", Comparative Political Studies, vol. 14, no. 4, p.468.

Note : the totals add up to 200 per cent as first and second choices are taken into account.