

EUROPEAN COMMISSION DIRECTORATE-GENERAL JRC JOINT RESEARCH CENTRE Institute for Prospective Technological Studies (Seville) **TECS – Futures Programme**

Demographic and Social Trends Issue Paper: Mosaic Living

Prof. Richard Scase

Institute for Social and Economic Research, University of Essex

Nº Series: 07

EUR 18969 EN

September 1999

Foreword

This paper has been produced in the context of *The Futures Project* of the IPTS, in particular the part dealing with demographic and social trends. It relates specifically to the analysis and projection of trends in the activities and institutions which structure peoples lives and their use of time. It advocates the transformation and fragmentation of heretofore familiar and stable structures, giving rise to the emergence of a *Mosaic Society* at the threshold of the 21st century.

Much of the first year's work on *The Futures Project* from mid-1998 to mid-1999 has been organised around five expert panels including one on Demographic and Social Trends¹. A separate report (Futures Report No. 2: *Demographic & Social Trends Panel Report*) summarises the work and achievements of this panel. (Report No. 1 in the <u>Futures Report Series</u> entitled *The Futures Project: Overview* provides an account of the scope, methods and aims of the overall project.)

This present paper provides complementary information, analysis and views on some of the key social issues that the panel raised, but in a more focused and elaborate way than has been provided in the Panel Report.

Given that the author of this paper has also been a Panel member, the way in which some of the themes are developed stems naturally from the ideas generated and discussed by the Panel. However, much of the discussions in the paper are developed beyond the point reached at the panel meetings, and in directions primarily determined by the author. In view of this, the paper does not necessarily represent the views of the panel as a whole, nor of the IPTS, but it nonetheless constitutes a rich source of additional material and ideas, which the Futures Project can draw on as further work unfolds.

James P. Gavigan & Mathias Ottitsch D&ST Panel Co-ordinators²

IPTS, 1999

¹ The other Panel themes were Information and Communication Technologies and the Information Society; Life Sciences and the Frontiers of Life; Natural Resources and the Environment; and The Political and Economic Context.

² For further information, contact the IPTS:

World Trade Center, Isla de la Cartuja, s/n, E-41092 Seville, Spain

Phone.: +34 95 448 83 19, Fax: +34 95 448 83 26

E-mail: james.gavigan@jrc.es, http://www.jrc.es

The Futures Project is a major prospective exercise of IPTS that explores the likely effects of the major economic, social and technological developments which will take place in Europe and the world in the next ten years on Technology, Employment and Competitiveness in Europe by 2010. It is organised as an interactive process based on expert panels and workshops, and supported by background research.

The output of the Futures project is a series of reports to be published in the course of 1999. The first publications will be an overview report and four panel reports (May 1999):

Report 01	The Futures Project: Overview
Report 02	The Demographic and Social Trends Panel Report
Report 03	Information and Communication Technologies and the Information Society Panel Report
Report 04	Life Sciences and the Frontier of Life Panel Report
Report 05	Natural Resources and the Environment Panel Report

A series of **Issue Papers** developed by different expert panel members will also be published (March – May 1999)

All reports will be available from the IPTS and will be available from the Futures Project Website:

http://futures.jrc.es

Further reports in the series will be announced on the website as they are published.

Table of Contents

Table of Contents1
Executive Summary3
Summary4
Introduction5
1. Demographics5
2. Families and households7
3. Work and employment12
4. Education and Learning16
5. Leisure, Lifestyle and consumption17
6. Information and communications technologies (ICTS)18
Conclusions23
Bibliography25

Executive Summary

This report attempts to identify some of the major trends that are likely to characterise a future Europe. It is a scenario of emerging lifestyles characterised by greater mobility, diversity and change. The following report is organised in relation to a number of themes. These are: (1) Demographics; (2) Families and households; (3) Work and employment; (4) Education and learning; (5) Leisure, lifestyle and consumption; and (6) Information and communication technologies.

1) Demographics

The population will become older with an increasing proportion dependent upon the productive capacity of those of working age. This will affect the demand for care and health services as well as patterns of personal consumption. The retired population will enjoy greater diversity in life style and leisure pursuits. An increasing number can expect to enjoy at least twenty years of retirement. This will have implications for policies towards pensions.

2) Families and households

Families will become smaller with an increase in single person households. There will be greater variety of household forms with higher rates of divorce. This rate will decline in the future, however, reflecting fall in the rate of marriage. Personal relationships will be more varied than in the past.

3) Work and employment

The growth in the information and service sectors of Europe will affect work cultures and labour mobility. There will be an increase in the number of women who are professionally, academically and technically qualified. This will allow them to lead more independent life styles and have higher patterns of personal consumption. There will also be the growth of entrepreneurship, small business ownership and self-employment. There will be a growth of non-standard employment, e.g. part-time and flexi-hours as well a greater incidence of job changes both within and between companies. Increasingly, those entering the labour market will need to develop 'independent' career strategies in order to cope with the greater uncertainties of labour market trends.

4) Education and learning

There will be a continuing increase in the proportion of the population enjoying tertiary education. This will be particularly the case for the over 25s. Lifelong learning will also be more significant, with much of this becoming available through distance learning methodologies made possible by information and communication technologies.

5) Leisure, life style and consumption

Changing demographics, education and work opportunities will drive these. There will continue to be diversity between the countries of Europe but there will also be some common themes in future trends. Spending on food will continue to decline while more will be spent on health and medical products. The single person household will be a key factor driving future retailing trends. So, too, will be developments in information and communication technologies (ICTS)

6) Information and communication technologies

The explosion in the use of mobile telephony is an appropriate indicator of changing work and leisure patterns as well as of changing personal life styles. This will continue in the future as people become more mobile in their daily work (e.g., 'hot desking') and their jobs require them to be in immediate contact with both colleagues and customers. The growth of self-employment and entrepreneurship are further forces behind the demand for instant communication. The growth in the proportion of households 'on-line' will be a key driver shaping the future of retailing as well as of corporate marketing and selling strategies.

Summary

The future of Europe will be one with a very different demographic profile to that which prevails today. This is likely to be reinforced by further enlargement, which will add to the diversity of future lifestyles and patterns of personal relationships. In the first decade of the twenty-first century, there will be forces for convergence as well as for divergence, both within as well as between the different countries of an enlarged Europe. Although information and communication technologies will play a key role in shaping these future patterns, these will be affected to a far greater extent by socio-demographic and cultural factors. As in the past, it is these that will largely determine the utilisation of new technologies and, therefore, work patterns and life styles. If the direction of some of these is uncertain, what is certain is that peoples' lives in the future will be characterised by greater mobility, job change and diversity in personal relations. It will be a shift to 'mosaic living'.

Introduction

As Europe moves into the twenty-first century, there will be the continuing fragmentation and break-up of traditional life-styles. The words that most appropriately describe these patterns are those of individualism, diversity, mobility and choice. These will therefore become more pronounced within personal life-styles across the European Union, despite continuing differences between countries. What we are witnessing is the decline of life styles characterised by order, predictability and stability. For instance, in the past citizens could expect to live in more or less the same community for sustained periods of time (if not for the whole of their lives), to be engaged in the same occupation over an extended period of years, to work for the same empoyer, and to be incorporated within fairly stable networks of family and friends. Order and stability depicted personal life styles across the whole of Europe, not withstanding national contrasts.

The break-up of these traditional patterns is the outcome of a number of structural forces which will continue to shape the future of Europe. These range from globalisation and its impact upon the nature of work and employment, to changing demographics and the ramifications of the application of information and communication technologies. In this report we describe the increasing emergence of individualism, diversity, mobility and choice in personal life styles by reference to a number of key areas. These should not be regarded as having distinctive or logical boundaries but rather as organising principles for summarising some relevant quantitive data. These are (1) demographics; (2) household forms; (3) work and employment; (4) education; (5) leisure, recreation and consumption; and (6) information and communication technologies.

1. Demographics

The age profile of the EU will change over the next twenty years according to the following pattern (using the 'low scenario' of Eurostat projections and assuming the continuation of trends since 1980).



Fig 1. Predicted changes in age profile EUR15 1980-2020 (Figures as percentage of total population)



From Fig1 it can be seen that there will be a significant drop in both the absolute number, and relative proportion, of young people. There will be fewer young people available for employment, supporting an increasing ageing population. The dependency ratio will increase, with the number of people aged 15-64 to each person 65 and over, decreasing from 4.66:1 in 1980 to 3.88:1 in 2010 (Fig 2).





(Based on low scenario, source: "Beyond the predictable: demographic changes in Europe up to the year 2050; statistics in focus, population and social conditions" Eurostat 1997/7 and Eurostat Yearbook 1997/7.

This will have an effect on household formation as well as for macro patterns of consumption, retailing and the use of leisure and recreation services. An ageing population and continually declining birth rates (Figs 3 and 4) will contribute to Europe's share of the world's population falling from 11 to 5 per cent.

Fig 3. Completed fertility by generation 1945-1960 EUR15



Source: Demographic statistics, Eurostat; 1997.

(Completed fertility refers to the ultimate mean number of live births born alive to women born in a particular year).

Fig 4. Total fertility 1960-1995 EUR15



⁽Total fertility refers to mean number of children born alive to a woman during her lifetime if she were to experience during her child bearing years the age specific fertility rates of the respective calendar or period) Source: 1975-1995 data and definition, Eurostat Yearbook 1997 /1960-1970 A social portrait of Europe: Eurostat 1991

With this background, it is important to consider the changing composition of the European population. Internal migration has increased since 1980 and this is likely to continue as a result of labour market harmonisation. External immigration, from Turkey and other Mediterranean non-EU countries to mainland Europe and from the former commonwealth to the UK has cumulatively altered the cultural profile of the EU. The mobility, interaction and synthesis of different EU and non EU cultures within EU states will increasingly lead to more fragmented national cultures. Increased international mobility will also have a major impact in that it will become a significant contributor to the growth of single person, transient, households.

2. Families and households

A number of trends will contribute to the 'individualisation' of European society. There will be a continuing shift to smaller household (Table 1) and family size, as well as a likely increase in the number of childless couples (Fig 5), and single parent families.

	EU	В	DK	D	GR	Е	F	IRL	Ι	L	NL	Р	UK
	12												
1980	2.8	2.7	2.4	2.5	3.1	3.6	2.7	3.6	3.0	2.8	2.7	3.3	2.7
1986	2.7	2.7	2.2	2.4	3.1	3.6	2.7	3.5	3.0	2.9	2.7	3.3	2.6
1990	2.6	2.5	2.2	2.2	3.1	3.3	2.6	3.3	2.8	2.6	2.4	3.1	2.5
1994*	2.5	2.5	2.1	2.2	2.8	3.2	2.5	3.2	2.8	2.6	2.4	3.0	2.4

 Table 1. Average number of persons per household 1980-1995

* 1994 data - Facts through figures 1996: A statistical portrait of the EU, Eurostat 1996

Fig 5. % Families comprising a couple with no children 1980-1995



Fig 6. % Families comprising a couple with child(ren) 1980-1995



Fig 7. % Families comprising child(ren) and one parent 1980-1995



There will continue to be a decline in marriage rates alongside the trend towards co-habitation. Since cohabitation relationships tend to last for shorter periods of time than marriages, there will be a tendency for individuals to be involved in a number of 'serial' personal relationships. This will also be the case for the divorced who tend to re-marry.

	Year	1970-74	1980-84	1990-94	1995
Country					
EUR 15		7.6	6.1	5.5	5.1
В		7.6	6.3	5.8	5.1
DK		6.6	5.2	6.3	6.6
D		7.0	6.3	5.7	5.3
EL		7.7	6.7	5.7	6.1
E		7.6	5.3	5.4	5.0
F		7.8	5.7	4.7	4.4
IRL		7.3	5.8	4.7	4.4
Ι		7.5	5.5	5.4	4.9
L		6.3	5.6	6.2	5.1
NL		8.7	5.9	6.0	5.3
А		6.8	6.4	5.7	5.3
Р		9.4	7.4	7.0	6.6
FIN		7.9	6.1	4.9	4.6
S		5.1	4.5	4.2	3.8
UK		8.2	7.1	6.0	5.5

Table 2. Crude marriage rate 1970-1995 (number of marriages per 1000 inhabitants)

Source: Statistics in focus – population and social conditions Eurostat 1997/14

Year	1970-74	1980-84	1990-94	1995
Country				
EUR 15	1.0	1.6	1.7	1.8
В	0.8	1.7	2.1	3.5
DK	2.5	1.7	2.1	3.5
D	1.5	2.8	2.6	2.5
EL	0.4	0.7	0.7	0.8
Е	-	0.4	0.7	0.8
F	0.9	1.7	1.9	2.0
Ι	0.4	0.2	0.5	0.5
L	0.7	1.6	1.9	1.8
NL	1.1	2.1	2.0	2.2
А	1.4	1.9	2.1	2.3
Р	0.1	0.7	1.2	1.2
FIN	1.7	2.0	2.6	2.7
S	2.1	2.4	2.4	2.6
UK	1.8	2.8	3.0	2.9

Table 3. Crude divorce rate 1970-1995 (number of divorces per 1000 inhabitants)

Source: Statistics in focus - population and social conditions Eurostat 1997/14

	-	of marriage marriage co	U	Mean duration of marriage at divorce				
Marriage cohort	1960	1970	1980	1960	1970	1980		
EUR 15	14	22	27		13.8	12.3		
В	-	26	34		16.3	14.7		
DK	29	40	44	14.2	12.0	10.8		
D	18	27	33	12.8	11.5	10.5		
EL	-	8	12		13.6	11.5		
Е	2	5	9	29.0	22.0	15.0		
F	16	27	33	17.0	15.2	13.7		
Ι	3	5	7	22.1	19.6	16.3		
L	14	25	36	17.0	15.0	12.4		
NL	17	25	31	17.4	14.6	12.2		
А	18	26	32	11.8	11.4	10.5		
Р	5	9	14	23.1	18.2	14.9		
FIN	23	31	38	15.8	14.0	13.5		
S		38	46		13.1	12.0		
UK	23	34	42	16.7	13.4	12.0		

Source: Statistics in focus - population and social conditions Eurostat 1997/14

These trends will have a number of important implications. They will lead to the growth of transient single person households, consisting of people shifting between relationships with implications for governmental, family, social and welfare policies. This trend will undoubtedly lead to an increase in the number of single parent households (see Fig 7). These will require initiatives especially directed to women, who as employees, will have particular needs in terms of child care and 'family-friendly' employer policies.

Future Europe will consist of a diversity of household forms. As mentioned above, there will be a large increase in the percentage of single person households. In 1980 22% of households across the EU were made up of people living alone (table 5). By 1990 this had risen to 26%. Linear projections based on 1951-1990 data suggests that across the EU as a whole 30% of households will be occupied by a single person in the year 2000.

Fig 8. One person households (individual aged 15-64) as percentage of all private households 1980-1995 by country



Source: Europe in Figures 4th Edition Eurostat 1995

Table 5. One person hou	seholds (across all ages) as percentage of all private households 1980-1995
by country	

	EUR 15	В	DK	D	GR	E	F	IRL	Ι	L	NL	Р	UK
1951	-	16	13	11.5	8.0	6.5	18.0	9.1	13.0	7.0	6.0	7.0	10.0
1971	-	18.0	23.5	25.0	10.0	14.0	19.0	14.0	-	15.1	17.4	10.0	18.2
1980	22	23.3	29.5	-	14.6	10.4	24.6	17.0	17.9	20.7	22.9	12.7	21.7
1990	26	28.4	34.6	33.6	16.2	-	15.3	20.2	-	25.5	29.9	13.9	26.7
2000	30	29.8	40.2	*	18.1	*	19.1	22.7	*	30	35.4	15.8	30.5

Source: Europe in Figures 4th Edition Eurostat 1995

Projections for year 2000 based upon linear regression model of 1951-1990 data . * Insufficient data for estimates

Alongside this there will also be the continuing growth of multi-person households consisting of those who are sharing accommodation. This will be more apparent among young people who leave parental homes to become students as well as among those who, after higher education, obtain jobs in the growth cities of Europe. This choice of accommodation will be driven by the need to avoid, in their early to mid-twenties, commitment to partners, employers and property. At the same time, the growth of this household form will be pronounced among the over 60s. This will range from sharing with other non-family related persons in order to 'pool' accommodation costs to the elderly who will be in forms of sheltered housing.

In terms of an individual's lifestyle, therefore, there will be variety in both personal relationships and in patterns of living. Each of these will be characterised by a greater degree of 'temporaryness' than in the past. Feelings of personal and emotional security will be more fragile and life histories will be more discontinuous, fragmented, adaptive and chaotic than in the past.

3. Work and employment

The future economy of Europe will be characterised by a continuing shift from manufacturing to information and professional services. This will affect the nature of the labour force, the demand for education and work-related skills as well as the culture and values of European society. It will be the basis for a more educated, mobile and individualised society. It will be both a driver and a reflection of the trends discussed above, especially the future nature of households.

Changes in the structure of the economy will lead to high rates of unemployment among older men with traditional manufacturing skills. There will be the death of life-long, full time jobs. There will be greater movement between jobs as well as between employers. The shift from manufacturing to information services leads to an economy based upon intellectual instead of machine capital. This generates more labour and geographical mobility, both within as well as between countries.



Fig 9. Percentage of working population engaged within each sector 1975-96 (EUR 15)

Derived from employment data in Eurostat yearbook 1987 and Community Labour Force Survey





Employment event refers to any job change, or shift in employment status such as becoming unemployed, obtaining another job after unemployment, entering further education, becoming self-employed.

Source: British Household Panel Study 1991-1996, Institute for Social and Economic Research, Essex University. U.K.

(Analysis - J.E. Scales, Health and Social Services Institute, Essex University)





Source: Europe in Figures 4th Edition Eurostat 1997

There will be an increase in the percentage of the labour force working on short, fixed term contracts. This has increased across the EU as a whole from 9% in 1985 to 12.0% in 1995 (Eurostat 1995). With this, there will be the continuing growth of part-time employment and also the numbers of those with 'second' jobs. A growing percentage of people will have portfolio careers. Initially, this is will to be more pronounced in some countries, such as the United

Kingdom, rather than others as a result of differences in governmental-driven labour market regulation (for example Germany and France). These trends, however, will be likely to become more even as working regulations become more standardised. With likely increased labour regulation the proportion of people employed in explicitly flexible job contracts will be likely to rise. Individuals will have a greater number of employment 'episodes' during their working lives, as demonstrated by the trend in the UK (Fig 10)

Trends in employment patterns continue to vary between men and women. Men's full time employment will continue to decline (Fig 12) whilst women's full time employment will continue to increase (tFig 13). Alternatives to full time employment will continue to expand for both sexes. There will be a convergence in the types of alternative employment undertaken by men and women with the proportion of men working part-time moving towards the same level as women and the proportion of women in self-employment becoming similar to that of men (Figs 12 and 13)).

Fig 12. Full time, part time, fixed term and self-employment as percentage of all employment and underlying unemployment rate EUR 15 1975-96 (men only)



Source: Europe in Figures 4th Edition Eurostat 1997

Fig 13. Full time, part time, fixed term and self-employment as percentage of all employment and underlying unemployment rate EUR 15 1975-96 (women only)



Source: Europe in Figures 4th Edition Eurostat 1997

A further growth factor will be the numbers of people working in small businesses and selfemployment. This will be stimulated by both high underlying levels of unemployment and the lower barriers to business start-up offered by an information and service based economy. This will mean that people's work and employment experiences will be featured by greater variety. Periods of working in large firms may, for some, be followed by a period of self-employment. This may then be followed by a combination of part time paid employment and self-employment or subcontracting to a small firm before, again becoming fully self-employed. These changes will require employees to be both geographically and psychologically mobile. They will need to call upon a wide diversity of personal and vocational skills as well as possessing the necessary abilities for being self-employed and for setting-up and managing their own entrepreneurial ventures. All of this will be in sharp contrast to the routine and stability offered by traditional employment patterns characteristic of many of the 'northern' economies of Europe.

There will be a continuing growth of working from home, with employees, consultants and the selfemployed increasingly undertaking their work tasks 'online'. This means that work activities will be undertaken in a variety of contexts reinforcing the diversity of experiences that individuals will encounter on a weekly or even daily basis. Changing patterns of work will accelerate. Alongside those mentioned above, there will be more non-standard working hours as both employers are forced by increased global competition to make more efficient use of their capital installations and equipment whilst becoming more limited in their exploitation of labour. There will be more flexible working practices and a shift towards the 24-hour workplace as enterprises in Europe trade across time zones within a global economy. At the same time these changes increase consumer demand for all-day and every-day services. The normal working 'day' and sleeping 'night' will become increasingly blurred and fragmented for many people.

Entry into the labour market will be at a later age (Fig 14).



Fig 14. Age at which at least 50% of people of that age are in the labour market 1987-1996

Source: Eurostat: Labour Force Survey 1996.

There will also be a tendency to withdraw from it earlier (Fig 15). People will retire from their jobs in their fifties, allowing them time to pursue various leisure, educational, recreational and travel activities. This will add to their life experiences and contribute to the personal mosaic. Despite normal retirement ages of 65 for men and 60 for women (with one or two country exceptions) employment activity rates for those over the age of 60 continue to decline.

Fig 15. Activity rates for 60-64 year olds 1991-1996



Source: Eurostat: Labour Force Survey 1997.

4. Education and Learning

The length of time in full time education will continue to increase. There will be an increase in the proportion of people who enter tertiary education after a period of employment (Fig 16).



Fig 16. Percentage of new entrants to higher education aged 25 and over 1991-1995

Selected countries only due to data availability. Source: Eurostat Social Portrait of Europe 1998

As importantly, the number of episodes of education over the life course will expand with lifelong learning becoming common place. The mode of delivery of educational packages will change with distance learning experiences available over the Internet increasing the possibilities for those who wish to combine employment with skill upgrading. Multi site educational programmes will continue to develop with increased numbers of students crossing national boundaries in order to complete internationally recognised qualifications. For these multi-lingual, multi-culturally literate 'new Europeans' national boundaries will have little significance. This personal learning mosaic will be further enhanced by access to global knowledge made available by continued improvements

in information and communications technologies including virtual conferencing and interactive software.

5. Leisure, Lifestyle and consumption

Transformations of the sort discussed in the previous sections will have important ramifications for leisure lifestyle and consumption. Because of changes in the nature of households, together with the asociated diversities in personal and social relationships, traditional marketing categories based upon socio-economic status will no longer be relevant. Within each of these there will be market segmentations based upon personal life style biographies. Some of these outcomes are reflected in trends in the consumption of foodstuffs, patterns of retailing as well as travel and recreational pursuits.





Consumption patterns, as measured by proportion of household expenditure, across the EU have changed markedly over the past thirty years (Fig 17). These trends will continue, and accelerate. The proportion of household budget spent on food and clothing will continue to fall reflecting both increased productivity, especially at the level of distribution and marketing as well as changing household composition. Housing will continue to cost more, as increases in single person households create additional demand for homes. The supply of housing will remain limited due to lower levels of productivity growth in the construction industry combined with regulatory pressures that will continue to limit the availability of land for building purposes. Moreover, single person households will face higher housing and domestic fuel costs pro rata due to their lack of domestic economies of scale. New technology, combined with a rapidly ageing population, will continue to push up the cost of medical care. Due to these financial pressures the proportion of household sepecially to explore new forms of sociability that do not rely on consumption of final marketed goods and entertainment services.

6. Information and communications technologies (ICTS)

Future trends, driven by highly individualised, fragmented and personalised lifestyles will also be shaped by changes in demographics along with developments in information and communication technologies as well as new productive paradigms that enable mass customisation and niche marketing. The exponential growth of mobile telephony in the 1990s and predicted to continue into the 21st Century is a reflection of these lifestyle changes. It embodies the mobile individualised consumer who needs to maintain contact with relevant networks and to be always available within loosely structured, 'virtual' communities and work environments (Fig 18).



Fig 18. Growth in mobile telephony across EU (millions of subscribers)

Source: EC Job opportunities in the information society 1998

Alongside this, the shift to the EU as an information society is being driven by the increasing adoption of PC and internet technologies in the home. For example, in the UK, the percentage of homes with a PC has risen from 22% in 1991 to 30% in 1996 and is projected to rise to 60% in 2004. Chart 2 provides predictions for domestic PC penetration for selected major EU countries.

Fig 19. Projected domestic PC penetration, 2004



Source: Department of Trade and Industry: Towards the Virtual Society, 1997

Already 29% of adults in Britain have access to the Internet in some way – with 14% having online access directly from home. Other European countries show even higher levels of home internet access with 21% of Swedish adults having on-line Internet access from their homes (ICM Research, 1999). The EU wide exponential growth of home based online internet access is illustrated in Fig 20.



Fig 20. Number of EU households (millions) with online access

Source: J. Ginarlis, Virtual Finance: A Survivors Guide; Computer Sciences Corporation, 1999

The impact of the internet for retail markets in Europe is illustrated in Fig 21. This shows that within the EU as a whole there are differences between countries while at the same time the EU will lag behind the United States. This growth in E-commerce will inevitably lead to cross border purchasing and the offer of a wider variety of goods, services, information and entertainment to European citizens. This will reinforce the potential mosaic of experiences.



Fig 21. Projected growth in E-commerce - selected EU countries 1998-2001 (M\$US)

Source: J. Ginarlis, Virtual Finance: A Survivors Guide; Computer Sciences Corporation, 1999

Rapid advances in digitalisation will allow exponentially larger amounts of information and data to be moved and accessed instantly. ICT technologies will become more integrated and 'seamless'. This will have major effects across all aspects of life. For instance in the world of work it will be possible for corporations to operate as 'virtual organisations' which incorporate the talents and skills of employees and other associates not only within Europe but also from a broader global context. This in turn will 'internationalise' the diverse cultures of Europe and, as a consequence, will reinforce the diverse mosaic of people's work patterns and lifestyles. This trend will be enforced by transformations of the provisions of home entertainment services whereby citizens will have access to entertainment and education services that are offered in a global context and made available without passing through filters of government regulation. New cultural preferences - the growing popularity of American baseball in Italy and Australian rules football in the UK - are but instances of the fragmentation of national cultures, that is emerging.

ICTs will also contribute to the solution of caring for Europe's rapidly ageing population through online monitoring, it will be possible for the elderly to live more independently and therefore enjoy more diverse lifestyles than they would otherwise experience in institutionalised care. University students will be able to develop personal learning portfolios selected form different universities in the different regions of the world. ICTs will enable there to be virtual learning methodologies with groups of students interacting on a global basis. They will also encourage lifelong learning patterns, which will reinforce the flexibility of personal skills and therefore, the opportunities for greater mobility and variety in people's work lives and lifestyles in national, and in broader European and global, contexts. Other examples could be quoted to demonstrate how developments in ICT can be forces for diversity rather than global homogeneity and thereby increasing the mosaic of peoples work patterns, educational experiences and personal lifestyles. Such is the likely impact of ICTs that this warrants a separate and detailed analysis. Namely, an investigation that explores the interplay of cultural factors and these technologies for shaping developments in the heterogeneous and diverse future Europe.

Conclusions

This paper highlights some of the major trends that will affect the future of Europe. As to be expected there are forces of both *continuity* and *change*; of *convergence* and *divergence*. Out of these will emerge mosaics of living characterised by greater opportunities and choices in life styles, work patterns and personal relations. Cultural traditions will have less impact upon life styles but this will not lead to homogeneity either within or across national borders. Individuals are likely to become more cosmopolitan and European in their outlook but not by rejecting many local loyalties and personal attachments. Changing patterns of employment, the growth of entrepreneurship and self-employment and the more 'transient' nature of personal relations will generate more self-reliant and individualistic cultures. Personal mobility will be greater and social networks more widely constituted. The internet and other ICTS will play a key role in work, employment and personal life styles. If the direction of change within specific life spheres is uncertain, the overall direction of change is likely to be towards "mosaic living".

Bibliography

Department of Trade and Industry (1997) Towards the Virtual Society. London

- Economic and Social Research Council (1991-1997) *British Household Panel Study*. Institute for Social and Economic Research. University of Essex.
- European Commission (1998) *Job Opportunities in the Information Society*. Luxembourg: Office for Official Publications of the European Communities.
- European Commission (1994) *Employment in Europe*. Luxembourg: Office for Official Publications of the European Communities.
- Eurostat (1998) A Social Portrait of Europe. Luxembourg: Office for Official Publications of the European Communities.
- Eurostat, (1997/98) *Beyond the Predictable: Demographic Changes in Europe up to the Year 2050.* Luxembourg: Office for Official Publications of the European Communities.
- Eurostat (1997) *Statistics in Focus: Population and Social Conditions*. Luxembourg: Office for Official Publications of the European Communities.
- Eurostat (1997) *Labour Force Survey*. Luxembourg: Office for Official Publications of the European Communities.
- Eurostat (1996) A Statistical Portrait of the EU. Luxembourg: Office for Official Publications of the European Communities.
- Eurostat (1995) *Europe in Figures*. (4th Edition). Luxembourg: Office for Official Publications of the European Communities.
- Ginarlis, J. (1999) Virtual Finance: A Survivor's Guide. London: Computer Sciences Corporation.
- Scase, R. (1998) *Towards the Future: An Agenda for Debate*. Swindon: Economic and Social Research Council.