

# Future Expectations for Europe

Pan-European Futures Study with Comments by 19 Futurists







# Ulrich Reinhardt, George T. Roos (Ed.) Future Expectations for Europe

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#### **Preface**

Scientific research reveals new insights and prompts us to contemplate the future. Futures research in Europe can look back on a long tradition in this field: from the augurs in Delphi via Thomas Hobbes, Thomas Morus, Jean-Jacques Rousseau, Victor Hugo or Tommaso Campanella to Robert Jungk. We want to continue this tradition and present views of what life will be like tomorrow. In this, research should not only focus on "How will we live tomorrow" but also on finding answers to the question "How do we want to live tomorrow". It is not enough to be able to proudly claim in twenty or thirty years that we already knew in 2008 what the future would hold, but have no answer to the question, "Then why didn't you do anything to ensure that xy did or did not happen".

This was the basis for a joint book project initiated by the Stiftung für Zukunftsfragen – a joint initiative of British American Tobacco and the European Futurists Conference Lucerne. From ten different countries, 20 scientists were enlisted who undertook a differentiated analysis of eight different topic categories. The basis for their evaluation was an extensive representative survey in which over 11,000 respondents in the nine countries Austria, France, Finland, Germany, the UK, Italy, Russia, Spain and Switzerland were interviewed concurrently. The result is the book project "Das EuropaDelphi – Szenarien von 19 Zukunftsforschern aus elf Nationen" ("The European Delphi – scenarios of 19 futures researchers from 11 nations"). The title of the book was chosen for two reasons: on the one hand the "European Delphi" is intended to continue the tradition of the Delphi Oracle and provide an insight into the future. On the other hand, the title represents the starting signal for our European research, which over the next few years will examine Europe's future using various methods, in various countries and drawing on the opinions of various experts. There is not just one future and the future is not a coincidence. It doesn't just happen. It is shaped. For example by politics, which sets the course and provides the framework, by the media, which report and inform, down to corporate enterprises, which also influence the future through their actions and requirements. Above all, though, by the citizens themselves, who through their behaviour play a proactive role in shaping tomorrow's world. And in this, no-one is so naïve as to believe he alone is instrumental in this process. Global problems affect all of us (for example, climate change or the demographic development in some countries). New challenges are emerging in place of or alongside old ones (such as migration or globalisation). Technology is creating unimagined new possibilities and challenging us to master them (for example nano- or biotechnology). New global powers are entering the world stage and shaping the future with their cultures (e.g. India, China or Brazil). And last but not least, there is a mainstream development that sets new social megatrends. This includes, for example, a greater awareness of health issues, the renaissance of the family or, parallel to this, the progressive individualisation of

Nevertheless it is and remains a fact that every citizen – whether as an individual subject or altogether as a society – has choices and options for shaping our future life. Visions of what the future will be like influence this volition. They not only anticipate our hopes (and fears) of a future world, but also express what future challenges are already on the horizon today, and are begging for solutions. As such, future expectations are an important aspect of futures research. They drive the development and are thus a central element of a systematic debate about the future.

We are therefore pleased – and just a little proud – to have filled a gap in this discussion.

Georges T. Roos und Ulrich Reinhardt

## PAN-EUROPEAN FUTURE STUDY "The Grand Transformation: A Brief Narrative" John S. Ratcliffe and Paolo Ronchetti

#### **EXORDIUM**

Why a 'Grand Transformation'? Truly, the 21st century is an extraordinary time. There is widespread recognition that we live in an era of rapid change in which new discoveries, philosophies and technologies play an ever more prominent part in shaping social and economic development. The world, and by implication Europe, is becoming increasingly complex, more competitive and better connected. There is economic internationalisation on the one hand, yet cultural decentralisation on the other. Society has shifted from an industrial base to an information and knowledge Advances in genetics, materials, energy, computing, robotics, miniaturisation, medicines, therapies and communication proceed apace. developed world is getting smaller, older and wealthier, whilst the developing world grows bigger, younger and relatively poorer. A blurring of boundaries between disciplines, industries and social enterprises is taking place. And, as those boundaries fade, the lines connecting the constituent parts become more critical, so that networks, systems and holistic thinking are more meaningful. Europe sits in the Moreover, crucial issues on a global as well as a European level demographic, natural resources, the environment and human culture - have to be addressed. All in all, a veritable transformation, or great disruption, is occurring. Something old is coming apart at the seams, and something new is emerging. Why 'Narrative'? Despite accustomed academic hostility, the attractions of narrative are all too apparent. Storytelling is pervasive in all our lives, and has been a prime part of our collective communications and individual conceptions since the commencement of civilisation. It is through stories that our values and our principles, as well as our fears and our problems, are passed from one generation to another. Storytelling is natural and easy, and hopefully entertaining and energising. Stories help us explore complexity, evaluate uncertainty and encounter risk. Stories can enhance or change perceptions; trigger remembrances or provoke reactions; and engage our feelings or assist in sharing our beliefs. And they do all this in a largely non-adversarial way which by-passes normal defence mechanisms. however, the use of narrative is a way of perceiving change and creating a preferred vision of the future – a 'prospective'.

#### Marmara Mansion, Sultanahmet, Istanbul, May 2030 The eve of the 2030 Charlemagne Prize Awards

Dr. Hürrem Nurbanu solemnly sipped her post-prandial coffee and swayed slightly in the stiff breeze that blew filfully off the Sea of Marmara at the spot where it converges with the legendary Bosphorus. She stood in pensive mood on the verandah of her beautifully restored Ottoman period mansion, perched sedately above Seraglio Point, on the thumbnail of land Sultanahmet, that is almost surrounded by sea and commands a panoramic profile of spiky minarets and cascading domes. An historic district basking in the splendour of two bygone empires, and now the home of a herald of a third. After thirty turbulent years, since the turn of the millennium, a Greater European Union was, at last, beginning to

emerge as a truly global power. How had this come about? What part had she played? And who could say what lay ahead?

The raucous shrieks of revellers returning to Cankurtaran Station below stirred Dr. Nurbanu from her silent reverie. She was not, in fact, alone. In the lengthening shadows behind her sat a visitor, Sir Terence Touchstone, a celebrity interviewer who had come to disturb her Turkish evening idyll. Though cocooned in the comfort of her own home, Hürrem Nurbanu, found herself strangely troubled. When this notoriously inquisitorial of broadcasters had called, she had willingly granted his request for an interview and invited him to visit Istanbul, rather than face him on the homeground of his own studios in Paris or by way of impersonal holographic link, as being a more restful and reflective retreat from where to reminisce. She had, after all, been retired for almost three years from being the first directly elected President of the Greater European Union, and whilst she was happy to recall the turmoils and triumphs of her career, she now felt a frisson of fright at the thought of the interrogation ahead. Tomorrow, in any event, she was to be honoured with the much coveted Charlemagne Prize for distinguished services to European unity.

Touchstone, the interviewer from EuroCast had, at her request, sent a preparatory list of questions. These had surprisingly plunged her into an odd humour of unease and uncertainty – a state of mind that had started to plague her more and more over recent months as fresh news about the fierce factional fighting between warring sections within the Chinese Communist Party reached the world's press. Could she have done more to build bridges with the 'New Mandarin's' and help their leadership create a fresh vision for China beyond the scramble for money and power. Probably, she shrugged. But, masking her self-doubt and trepidation she sat and settled across the table from Touchstone, poured some more coffee; and the interview commenced.

#### The World of Work?

"What first inspired you to devote your career towards constructing a stronger, bigger, more unified Europe?" Touchstone began.

"As you know, having been part of the unsuccessful team charged with negotiating Turkish entry into the EU in 2012, I became Minister for Economic Affairs in Ankara for several years concerned specifically with protecting and promoting Turkish jobs. During this time I quickly realised that lasting employment policies could only be framed on a pan-European basis, and that securing, so far as possible, meaningful work for all was the key to attaining all other social and environmental goals".

"How has the world of work changed for Europeans since then?" queried Touchstone, pushing aside the cup of unsavoury muddy sendiment that, to him, passed for coffee in these parts.

"Flexibility, mobility, adaptability and longevity have been the cornerstones of maintaining employment levels. When the world emerged from the Great Global Depression around 2014 it was clear that people would have to build a portfolio of jobs that would change through time and take them to different locations and for longer periods of their life. They would also have to grow their own pension fund, except in Scandinavian countries where the solidity of the social-democracy based welfare model has allowed pension schemes to remain public and people retire much earlier than do their southern counterparts".

"You played no small part in the Trade Wars at that time?"

"As a belligerent to begin with, angry with the calamitous breakdown of the Jakarta Development Round in 2013, resonant of the regrettable Doha Round collapse before it. But then, during my short spell at the reformed United Nations, I put my heart and soul into reconciling the conflicting sectoral interests, recognising that a complex set of balances between producing regions to optimise individual competitive advantage within an overall global framework was the only answer. This was largely achieved at the Lagos Concord in 2017, and has helped, among other things, to establish Europe as a genuine knowledge economy".

How simple it now all sounds, thought Hürrem, but how bloody it was at the time. "The working environment has also changed dramatically across Europe over the past few decades." Continued Touchstone, "Tell me what, in your view, has been the prime cause of this?"

"Energy costs, I suppose is the straightforward answer. But as profound an influence was the growing awareness throughout the 2010's that the conventional office building of the 20<sup>th</sup> century was no longer a stable building type as the impact of ubiquitous, powerful and reliable information technology steadily created radically new dimensions of spatial and temporal connectivity. My husband, as a commercial property developer, recognised a switch of accent around 2010 from the then all-prevailing 'supply chain' approach to a 'demand chain' attitude where occupying end-users have become infinitely better able to procure the working environment they desire to undertake their business in terms of time, quality and cost, and those involved in the delivery process rewarded accordingly".

"Has this process ended?"

"Certainly not. The workplace of the future will have to be even more flexible and adaptable, those keynotes again, to facilitate intra-company transformations, optimise intensity of use, increase the possibility of mutually beneficial interactions between companies, and promote the growth of embryonic businesses. It should also be fun!"

"So the most successful buildings, and cities for that matter I suppose, will be those that have the capacity to accommodate multiple interventions by users over the years in a welcoming and graceful way?" Added Touchstone.

"Exactly! I could not have put it better".

"But what about the might of the big corporations. Is it a threat to the European quality of life and work?"

Hürrem paused for a moment, remembering the battles she had fought with some of the giant global companies over the years and the scars they had left. "We are witnessing, in the world of work, part of a 'grand transformation' in society. The incredible success of the 'new economy' over the past decade or so allows companies to wield enormous power. With great power, however, comes great responsibility, and some might say even greater opportunity. Corporate social responsibility was for long seen as camouflage by many companies. Reputation is now recognised as paramount, and good behaviour seen as a key driver of competitive advantage. More than that, most leaders of global corporations now believe that corporate success depends upon the integration of social and environmental concerns, as well as economic, into company decision-making at all levels. CSR, as it is known to all of us, has become a defining feature of the current era of globalisation for good".

"You appear a supreme optimist" Dr. Nurbanu?"

"Optimistic, but watchful", responded Hürrem reflectively. "For corporations to carry on business which perpetuates poverty, degrades the environment or threatens social well-being is perilous, for it will invite the wrath of the legion of NGO's and civic groups who stand on guard to protect the worker and the consumer from those who misbehave."

The following eight boxes show the results of the survey 'Europe 2030' which was carried out on samples of 1000 people each in Austria, Finland, France, Germany, Italy, Russia, Spain, Switzerland, and UK. In each box the table above lists the overall weighted average of possible facts from the most to the least likely to happen in 2030 according to the people interviewed. The table below display some of the most evident comparative findings.

#### Box 1 - Work in 2030

	Facts – Weighed average results from surveyed countries
50%	Many employees have second or side jobs.
41%	Most employees have to work up to the age of 75.
31%	Production of goods takes mainly place in developing countries.
23%	The 10 biggest European companies employ more than half of the European workforce.
21%	Identification/empathy with the employer is low.
20%	Because of automation most people work less than 25 hours a week.
19%	Leisure time is more important for employees than a good salary.
16%	Full employment is possible because of the declining population.
15%	Every full-time employee has worked at least once abroad.
13%	Many employees receive dwelling, food, payments for pension funds and pocket money for their disposal instead of a salary.
8%	None of these statements will have come true.

Comparative Findings
- Finnish workers retire much earlier than their European counterparts.
- The Germans and the French value leisure time more than a good pay.
- Identification and empathy with the employer is stronger in Italy and Russia.
- In Russia automation allows people to work fewer hours than in the rest of Europe.
- The Swiss and the French are keener to work abroad at least once during their lifetime.

#### The Have's and Have Not's?

"Are you as sanguine about the persisting gap in Europe between the rich and poor?"

"No. Most certainly I'm not. But it takes time. You could describe the past twenty years as a period which has witnessed the 'triumph of trade over war'. Since about 2015 Europe has largely been shaped by constant economic growth driven by the processes of globalisation, privatisation and the liberalisation of major markets, including technology, energy, transport, pharmaceuticals and financial services. Ecommerce has become embedded in the fabric of European business, with explosive developments in artificial intelligence, biomimicry, voice and language technologies and the like. Europe has become a world leader in software solutions and biotechnology, paving the way for future medical and scientific breakthroughs.

Overall, indeed, Europe has emerged from the years of depression more competitive, more innovative and more flexible".

"But at a cost?" Interjected a slightly testy Touchstone.

"That's what I'm coming to. This economic change gives rise to serious social concern. What I believe we are beginning to move towards is a Europe of 'shared responsibilities' where sustained economic prosperity is matched by enhanced social equity based on legal certainty, market transparency and distributive justice".

"But what is the biggest challenge?"

Hürrem was quick to answer. "The transformation of the public sector."

"Explain, please?" asked Touchstone.

"Since about 2020 Europe has been undergoing a process of profound change." Started Hürrem Nurbanu cautiously. "In a relatively favourable global economic climate, it has been finding a way of reconciling its ideals of solidarity and respect for the individual with technological innovation and the pursuit of economic efficiency. At the root of this change undoubtedly lies the transformation of the public sector, which, after almost a decade of ambitious reform is becoming a facilitator or partner in society. The reverse side of the coin to CSR if you like. Government agencies, at all levels, aim to help individuals, firms and civic associations assume their share of responsibility for the life of the community. Dignified 'workfare' programmes across the EU in the early 2020's were a successful start to this."

"Nevertheless – the gap between the have's and have not's persists", persevered Touchstone.

"That, in itself, is not necessarily a problem", countered Hürrem. "What the worry is, is the quality of life of the poorest, and the equality of opportunity that exists for all". "Surely, that is often a matter of perception?"

Hürrem let the question hang in the warm night air.

Touchstone took a different tack. "How do you tackle old age poverty and the paucity of pensions, which would seem to be a separate issue of its own?"

"Again, I would refer to the respective responsibilities of public and private sector institutions we talked about earlier, but more tangibly I started the Temasek Talks, some five years ago, with the Sovereign Wealth Alliance for Good (SWAG) which, I am reliably informed, is on the verge of announcing its prime social policy objectives for each of the world's regions. That for Europe is likely to be the mobilisation of funds and initiatives to address just this thorny issue. I am genuinely hopeful that such funding will become a force for good in general, and at least a palliative, if not a panacea for the aged European poor".

"Time, I suppose will tell." Muttered a clearly querulous Touchstone, but, turning his notes, he rapidly recovered his normal composure and continued.

Box 2 - Relationship between poor and rich in 2030

	Facts – Weighed average results from surveyed countries
57%	The gap between poor and rich has become wider.
52%	Old age poverty is an unsolved problem.
49%	Many employees do not earn enough to save money for retirement.
37%	Life expectancy of rich people is much higher than life expectancy of poor people.
35%	The middle class has almost disappeared.
31%	The gap between industrialised nations and developing countries has become smaller.
20%	The government guarantees a minimum income for all – independent of age, gender, origin etc.
18%	The higher the income the more children Europeans are able to "afford".
16%	Educational programs provide children from common families with the same educational opportunities as children from academic families.
10%	The income of top managers has declined.
5%	None of these statements will have come true.

Comparative Findings
- The gap between rich and poor is not as wide in Spain as in the rest of Europe.
- In Italy and Finland old age poverty is better tackled than elsewhere in Europe.
- There is not much difference in life expectancy between poor and rich people in Russia.
- The middle class has almost disappeared everywhere in Europe but Finland.
- In Russian families there is an evident relationship between incomes and number of children.

#### Lifelong Learning?

"You have recently accepted the post of Chancellor of the New European University. An honour, of course, but one properly founded on your lifelong interest in education and learning. Perhaps you could recount the principal changes you have witnessed over the past few decades, since you yourself graduated from Istanbul Technical University and then INSEAD?"

"Let me start with what might seem to be a strange one. But one I consider fundamental for our knowledge society. It is 'creativity'. Creativity is the precursor to innovation, and innovation the key to competitiveness. For several decades, business, governments and organisations of all kinds have invested hugely in trying to make people more creative. But they have been treating a problem without tackling its real causes. Over the past ten years, however, there has been a growing realisation that everyone has creative capabilities, but the educational system, right from infant school through to graduate school, squeezed out and constrained those creative capacities. Organisations were left to fix a downstream problem originating in schools and universities. I am delighted to see the fruits of the 2020 EU 'Out of Our Minds' project, in which I am proud to say I played a small part, are just beginning to yield a rich harvest".

"Indeed, an educational revolution I too applaud. But what about the 'commercialisation' or 'privatisation' process that has endured over the past twenty years or so in the academic world?"

"The truth is that the educators in the early part of the century did not have the will, the vision, the wit or the tools to undertake their own transformation. It has come, often unwelcomed, from forces outside. Education generally became increasingly attractive to big businesses during the recessionary years, when more enlightened and far-sighted educational entrepreneurs from the private sector, using modern

technology, effective management and marketing techniques, best practice learning methods, sophisticated financing and unregulated terms and conditions of employment, entered the fray as serious competitors to established universities and colleges. The quasi-monopoly over higher education was broken by 2020 – some, like myself, would say satisfactorily so."

"Is there any particular change you would commend?"

"Well, taking one example that springs immediately to mind, the accent on developing 'life skills' aimed at increasing self-reliance, resourcefulness and collaboration, reflecting the erstwhile in-house training programmes of leading corporations emphasising such attributes as 'empowerment', 'enterprise' and 'teamwork', is starting to move generations of students from dependence, to independence and now interdependence."

"Well, I have to admit I can scarcely recognise the Oxford of my day.", exclaimed Touchstone, with an edge of nostalgia.

"Nor mine of ITU.", enjoined Hürrem, ".... perhaps more so, as the changes have been physical as well as pedagogic. There is now a new architecture, space plan and community. Those familiar watchwards of flexibility and adaptability prevail. The need for conventional classroom space is now almost entirely redundant. A mosaic of meeting areas available for small group teaching, and faculty offices designed to facilitate mentoring and tutoring has taken over. Further, on the one hand, I am reminded more of a modern airport where students check-in and secure assignments, allocation of resources and information regarding their programmes. On the other, they resemble town or village knowledge centres, with an array of academic community goods, services and facilities. Indeed, some are like shopping malls with competing or complementary colleges from across the world displaying their wares. Most welcome, perhaps, is the way in which leisure, recreation and civic facilities are shared with surrounding communities."

"Absolutely. It's probably also true that environmental quality and social amenity are of prime importance in an ever increasingly competitive climate within which to recruit and retain the best possible students and staff?"

"Agreed Sir Terence – and Europe has the very best, and some of the very worst examples".

#### Box 3 – Education in 2030

	Facts – Weighed average results from surveyed countries	
45%	More and more highly qualified women assume leading management jobs.	
40%	Most Europeans speak at least 2 languages fluently.	
38%	One fourth of the young employees work in professions which did not yet exist in 2008.	
34%	There are more private schools than public schools.	
33%	Online-lectures are given simultaneously by the best professors at different universities.	
31%	At least one further training per year is standard for each employee.	
30%	A system to detect special abilities develops many children starting already in kindergarten.	
22%	Talent scouts look for new recruits for big companies already in elementary schools.	
21%	Media are responsible for 1/3 of education and broadcast special educational programs for this purpose.	
18%	Informal education (e.g. self-development) is more important than formal education (e.g. school education).	
8%	None of these statements will have come true.	

#### **Comparative Findings**

- Russia is the only European country where women seldom take up leading management jobs.
- Constant training in the workplace is less common in Spain than elsewhere in Europe.
- The Russians seldom speak a second or third language fluently.
- Education has been fully privatized in Russia as compared to Finland where it is still largely public.
- The Finns value informal education more than their European counterparts.

"Let me turn to safety and security. The past twenty years or so have been characterised by what have become known collectively as the 'resource wars'. How inevitable was this, and what might we have done to reduce their incidence and intensity?"

"I suppose we all saw it coming. Most of the world's conflicts of the new millennium have been fought over the dwindling supplies of precious natural commodities and not over ideology. The political divisions of old have given way to a global scramble for oil, natural gas, minerals and water. And, as armies throughout the world have defined resource security as a primary objective, widespread instability has followed, especially in those areas where competition for essential materials overlaps with long-standing territorial and theological disputes. Nevertheless, apart from the ever-smouldering energy conflicts around the Caspian Sea Basin, Europe has, in the main, avoided too much violent upheaval. But it remains an uneasy peace".

Touchstone suddenly looked serious. "What then is the major security threat to our social order in Europe?"

"Crime – in all its manifestations. Organised and disorganised. Violent and non-violent. White collar and blue collar. Individual and collective. Young and old. Virtual and actual. One of the great issues preoccupying governments over the past 25 years, and one of the great challenges for the next quarter of a century, is the extent to which the state can, or should, use its influence to make people behave differently? How squeamish are we prepared to be in reversing what some would see as the overly liberal legislation protecting the right of the individual over the rights of the community that has been introduced during the first part of this century. Apart from the most obvious arenas of crime – drugs, theft, fraud, assault and the like, the containment of which has defied all the best endeavours of well-intentioned legislation, I note with great sadness other symptoms of cultural breakdown: the

abuse of liberty, the failure of the courts to define and constrain obscenity, the steep decline in public manners, and, in Gibbon's famous phrase, 'freakishness masquerading as originality, enthusiasm pretending to vitality'. But . . . . .", Hürrem smiled, "I start to sound like a grumpy old woman! Though I know I'm not alone, as you are well aware."

"Where will it end?"

"That's perhaps the point. I sense we are reaching some great historical turning point where there will be the emergence of a movement, with a populist leader, or leaders, who will unite various groups across Europe in a moral crusade against crime and social disorder with dramatic outcomes. The big question is the degree to which that leadership, and those groups, are truly benevolent, and the outcomes democratic and decent."

Touchstone shuffled his papers, paused briefly, then looking directly into Dr. Narbabnu's eyes asked "Given that view, where have you stood over the past decade in the privacy debates?"

"To be frank Sir Terence . . . . ", always a poor way to begin an answer she thought, "I have changed my position significantly over the past ten years. Whereas I used to be a fierce defender of individual rights and strongly opposed to such measures as extended closed circuit surveillance, mandatory DNA registration, random stop-and-search procedures and so on, I have come to view personal liberty as a kind of trade-off, with a price to be paid for safety and security, and prices possibly are rising?"

Box 4 - Security in 2030

	Facts – Weighed average results from surveyed countries	
49%	Organised crime is a big problem in all European countries.	
47%	Warlike conflicts about natural resources like oil, gas or water take place.	
45%	Internet related crime has increased very much.	
38%	Penalties for criminal acts are higher.	
35%	Surveillance computers identify many criminals directly when committing a crime.	
31%	For many people security is more important than their own privacy.	
30%	The crime rate of foreigners / immigrants is double the crime rate of natives.	
27%	New technologies like bio-or nano-technologies are more dangerous than expected in 2008.	
24%	Many people wear a chip for identification and localisation.	
24%	European / international data transfer helps to solve crime faster, people feel more secure than today.	
5%	None of these statements will have come true.	

Comparative Findings
- Internet related crime is kept under control in Italy and Russia.
- Penalties for crimes are generally higher in Europe except for Italy and Russia.
- In Italy, Germany and Spain the crime rate of foreigners is much higher than that of natives
- The Germans, the Swiss and the French are less willing to give up their privacy for more security.
- Finns are more willing to wear a chip for identification and localisation.

#### Whither Family Values?

"Family has always been important to you." Touchstone's tone noticeably softened, as he took up a new theme. "How do you react to what have clearly been a changing set of family values across Europe?", he asked.

"Society has become less stable, I believe, with the majority of marriages now ending in divorce. The trend towards marriage being replaced by a temporary civic contract principally to facilitate the upbringing of children, so prevalent in Scandinavia, is now beginning to spread to southern Europe. In marked contrast, as you know, to China, India and Japan which have remained more traditional socially ordered societies."

"Are social order and marriage necessarily synonymous?"

"Both the social and economic costs of family break-up are not widely appreciated. Even after adjusting for the greater poverty of one-parent families, it appears that their children are more likely to leave school early and to be unemployed than children from homes with two parents present. I have always believed that the conventional family unit is an efficient mechanism for combining the bringing-up of children and the earning of a living."

"And the concept of community?", queried Touchstone.

"Everyone say's that community spirit has weakened over the past quarter of a century, but I think rather that it has changed. Today, most 'communities', are based on non-family and non-geographical links such as interest groups, professional associations and voluntary organisations. These flourish. It is also perhaps true that the loss of several thousand EU troops in Saudi Arabia in 2018 on so-called peace-keeping duties somehow reinforced the desire to cherish kith and kin. Religion, of course, provides an important sense of community for many people, and, thankfully, the more fundamentalist elements of Christian evangelism and the Muslim faith have been partly reconciled since the horrendous events in Berlin at Easter 2023."

"There must have been some changes that have surprised you in terms of your own family?"

"There certainly have. I never expected that two of my four children would have met their partners over the internet, and I surely never expected to participate in intimate family conversations about the choice of sex and other defining features of my grandchildren. It is sometimes most bizarre."

"As a campaigner in your younger days for the rights of women in Turkish society, you must have witnessed some pleasing developments in the role of women in European affairs? You, of course, are an exemplar!"

"Absolutely. Women have achieved equality in most spheres of life. The facts regarding this are well recorded. What is less well understood is the degree to which all European society is being 'feminised'. This is an extremely important underlying change, and contributes hugely to the 'grand transformation' I believe to be taking place across greater Europe."

"What does this mean?"

"Put very simply, it implies that more weight is given to such societal norms as: people orientation; quality of life and environment; service ideals; sympathy and interdependence; intuition and creativity; cooperation and dependence; levelling, caring, and trying not to be better than others; and a fluid attitude towards sex roles in society, especially towards the exercise of power. Mind you, I was always rather fond of a remark by Margaret Thatcher: 'In politics,' she stated, 'if you want anything said, ask a man; if you want anything done, ask a woman.' This I have found largely to be true."

#### *Box 5 – Family in 2030*

	Facts – Weighed average results from surveyed countries
60%	Most couples live together without being married.
42%	Same-gender couples are allowed to get married and to adopt children.
38%	Because of the aging society more and more day care centres for senior citizens (like day-care facilities for children) open.
34%	The compatibility of work and family (work-life-balance) is possible for many women.
32%	Women have two children on average.
30%	Every third partnership/ cohabitation/marriage results from internet-dating-networks.
28%	Family members bear the financial responsibility for the old-age pensions of their parents/grand parents.
27%	Sex, hair colour and size of children can be selected in cases of artificial insemination.
27%	There are more people older than 60 than people younger than 30 sharing flats.
9%	Because of the large number of older citizens and the consideration of younger people's interests at the same time the votes of citizens under the age of 50 count double in elections.
6%	None of these statements will have come true.

Comparative Findings
- In Russia and Italy, gay couples still encounter problems when getting married and adopting children.
- The balance between family and work is still far from reality for Italian and British women.
- Internet dating networks are less effective in Italy and the UK than in the rest of Europe.
- The Italians often take care of the financial responsibility for the elder members of the family.
- In Germany, Italy and Switzerland it is usual for people over 60 to share flats.

#### What Environment?

"High on the European agenda throughout the century to-date has been the goal of 'environmental sustainability'. Sustainability perhaps is likely to define the coming era in the same way that technology defined the past. What are your most immediate thoughts on this seemingly all-pervasive subject?"

"You are right to couch such a complex issue in those sweeping terms, for I believe that one of the greatest challenges of the 21st century is reaching what I care to call a 'détante with dilemma'. No more so than in the field of environmental policy. Well-schooled in solving problems, governance at all scales has had to re-educate itself over the past few decades in the art of acting intelligently, and also compassionately, in situations that have no obvious or quick solution. We have begun to develop tools and processes for teasing-out the first-, second-, and third-order dilemmas in those situations. Whether it was the oil-peak of 2015, the water crisis of the mid-2020's or the serious and continuing coastal flooding we are now experiencing. Reconciling multiple stakeholders and design processes that generate new values out of apparent conflicts of interest is a skill we are developing. The challenge, therefore, is to reach some kind of détente with dilemma in a world with no externalities."

"Is the very term 'sustainable development' an oxymoron?."

"A clever question – but no. Twenty or more years ago it was thought difficult to reconcile the 'sustainable' bit with the 'development' bit. And there is still a tendency to underestimate the nature of environmental problems, under-appreciate their complexity and postpone timely action. But the 'marketisation' of the environment has gone a long way towards conciliating the two ideals of sustainability and growth. Environmental services and products of all kinds have proved to be an extraordinary commercial opportunity – not just in the developed world, but across all regions of the globe, where a new breed of environmental

entrepreneurs have brought imagination, innovation and invention to redefine and run a whole range of revolutionary business models."

"And the European Union, now, of course, the Greater European Union, what part has it played?"

"Reconciling growth and sustainability has long been at the heart of European policy, and over the past 15 to 20 years ideological concerns about the environment have been translated into practical action. The EU, now the GEU, for example, has imposed a wide range of eco-taxes and environmental levies so that individual polluters face stringent financial penalties. Massive support has been given to the provision of clean energy, and countries like Germany, Denmark, Norway and Sweden, which invested early in the development of renewable energy technology are major exporters of energy across a greater European grid, and of transformational technology to the world. Even the ill-fated interlude of Green Party led coalitition government from 2018 to 2020, which saw successive bouts of legislation aimed at securing a path towards sustainable development was a milestone. ambitious and autocratic the measures might have been, and moribund from the outset, being unfundable from existing budgets at the time and unrealistic in terms of their promised time-scale, but they did help change attitudes and point the way. From 2022, and the creation of the enlarged Greater European Union, and, perhaps somewhat hubristically, under my own Presidency, the reforming Commission has set about profoundly shaping change in a more realistic manner. Policy initiatives, political processes and social values have all been geared towards encouraging individuals, organisations and communities to integrate environmental concerns into everything they do. A key focus in this has been the use of simple and transferable technology, together with native ingenuity peculiar to each region, to optimise the use of local and regional resources, without compromising long-term conditions and reserves. The capacity of different localities and regions to achieve this balance naturally varies, but can lead to diverse, and sometimes perverse, outcomes."

Hürrem drew breath. Touchstone spoke. "Serious problems, threatening our very future on the planet, still remain?"

"Crucial issues at a global level – demographics, natural resources, climate change, disease, energy, water, food and human culture – have, of course, to be addressed. But it is worth remembering that people around the world are becoming healthier, wealthier, better educated, more peaceful, increasingly connected and they are living longer. No more so than in the greater Europe".

"More peaceful? You wouldn't think so if you worked in the news media as I do.", exclaimed a slightly peevish Touchstone.

"Although great human tragedies like Iran, the Congo and Bangladesh dominate the news, the vast majority of the world is living in peace. Conflicts actually decreased over the 2020's, dialogues among differing worldviews are growing, intrastate conflicts are increasingly being settled by international interventions, and the number of refugees, such a terrible trouble throughout the first quarter of the century, is falling. Many other trends in such areas as life expectancy, literacy and democracy are extremely hopeful, or at least have a hopeful element, a veritable transformation, or great disruption, is occurring. Something old is coming apart at the seams, and something new is emerging."

"Possibly – but you must agree we can ill-afford to become complacent? Such signs are recent, and potentially transient."

"I agree that we can never afford to rest on our laurels, but I demur from your view that such auguries are essentially that modern or momentary. Though I suffer from bouts of pessism, like, I suspect, most people do, I remain at heart an optimist. What other choice is there?". The question, however rhetorical, hung in the air for second or two.

#### Box 6 - Environment in 2030

Facts – Weighed average results from surveyed countries	
50%	Most trash is recycled.
42%	Clean drinking water is a luxury item in Europe.
38%	Because of high energy costs rent for a flat including utilities is double the rent without utilities.
37%	Solar- and wind-energy account for more than half of the energy production.
34%	Pollution of the environment is no. 1 cause of death.
34%	More people live outside of big cities in order to escape environmental impacts in the inner cities.
26%	A large part of the population in developing countries has to starve because more plants a grown for regenerative energy than for food supply.
16%	The problem of climate change has been solved due to technical developments.
14%	Hunger is not an issue due to genetically modified food.
12%	Meteorological stations generate rain, sun or snow where it is required.
6%	None of these statements will have come true.

Comparative Findings
- The Russians still lag behind in sorting and recycling garbage.
- Renewable energy covers only a small fraction of the overall energy demand in Russia and Italy.
- In Germany the cost of utilities when renting a flat may be as much as the monthly rent.
- Russia and Italy hold the highest rate of deaths directly related to the level of pollution.
- Finnish cities are the least polluted in Europe and are, therefore, able to retain citizens.

#### What to Buy?

With a slight nod of his head, Sir Terence Touchstone relaxed a little, smiled, and continued. "Your daughter, Fatma, has made something of a reputation in the field of consumer behaviour. Apart from the obvious consumption trends relating to the rising cost of food, the domination by Asian producers of the durable goods market, the growth of the leisure industry and the inexorable rise of health service provision-what insights has she given you as to any 'meta-trends' that are affecting consumers attitudes?"

Hürrem laughed. "You're right. I have almost daily expert in-house opinion on this. There are, however, a number of recurring trends she relays to me. Let me try to list them if I can. To being with, 'connectivity' has constantly broadened consumer taste so that fashion is more eclectic and has an ever shorter shelf-life. Then, following the tough times during and after the recessionary years from around 2009 to 2014, continuous economic growth and highly competitive prices have led to a period of relative 'abundance' where people have accumulated large amounts of goods so that product innovation is increasingly important. A sort of 'wellness' concern for healthy living and healthy eating is still spreading, creating stronger and stronger market growth in fitness products and functional foods. Better education, greater affluence and wider choice have made consumers more 'demanding' and far less willing to

accept poor value or service. There is also the trend in an increasingly post-material society towards 'ethical consumerism' whereby producers and retailers are held to account for their impact on the environment and their treatment of staff. With less job security, and both partners in a household working, growing pressures on time and a desire for leisure have led to 'convenience' being an attractive attribute of consumer products and formats. A new term to me is what Fatma calls the 'limelight syndrome'; that is the desire by consumers, especially the newly affluent, to demonstrate their wealth or gain prestige by their choice of products. And the last that occurs to me, though I know there must be many more, is the power of 'distraction' where, with sellers competing directly with the rest of the experience economy - holidays, travel, cars, sport, recreation, leisure, culture, personal services and the like - and the experience range of consumers increases constantly, they either have to combine offerings in some way or become ever more dependent on excellence in merchandising. Overall, everything, Fatma insists, has to be more tailored, less plastic, aimed at the individual, about lifestyle, experience related and, naturally, value for money with outstanding after-sales service".

"Wow!" exclaimed Touchstone – obviously impressed.

"Nothing really – when you remember that for me every meal and trip to the shops with her is like a mini-master class on consumerism."

"At a different level, and on your own ground again Dr. Norbanu, I have heard you talk over the years about a 'new economics'. What do you mean by this?"

"Although I am not quite sure what form it will finally take, or looking back what we will call it, I confidently believe this century is witnessing a new kind of economics emerging within a new global economic framework. One that is starting to place a greater emphasis on 'systems thinking' and exhibit a more holistic approach as a way of breaking out of the narrow prism of GDP and market pricing that dominated conventional economic policy and practice over the first quarter of this century. Internalising the externalities you might say. The transformation I speak of so often is dependent on capitalism itself being transformed. I recall, as long ago as 2008, hearing an eminent Irish academic state 'Socialism collapsed because it did not allow prices to tell the economic truth. Capitalism may collapse because it does not allow prices to tell the ecological truth'. That adage has influenced my thinking every since."

"Fascinating." Touchstone seemed genuinely enthralled.

#### Box 7 – Consumption in 2030

	Facts – Weighed average results from surveyed countries				
61%	Everyday products (e.g. food) are significantly more expensive.				
36%	Most consumer goods are purchased online (Internet).				
34%	More than half of all products come from Asia.				
32%	Most households have at least two cars.				
31%	Luxury means time and tranquillity.				
29%	The biggest part of consumer spending is spent in the health sector.				
28%	Most people buy eco-friendly products (green products).				
24%	% Most consumer goods (cars, TV, clothes) are leased and not bought.				
19%	Most food products are produced domestically.				
16%	6 Service and advise are more important than a low price.				
5%	None of these statements will have come true.				

Comparative Findings					
- On-line shopping of consumer goods is widespread in Europe with the exception of Russia and Italy.					
- The Italians and the French consider time and tranquillity a luxury more than their European counterparts.					
- The highest rate of car ownership in Europe is held by Italy and Spain.					
- Russia and Italy have the lowest health care expenses in Europe.					
- It is customary for consumer goods to be leased by the Germans and the Swiss.					

"Finally, I should like to address the recurrent question of 'integration'. Your award tomorrow is in recognition of your distinguished record in the furtherance of European unity. What are your foremost thoughts at this time?"

Somewhat wistfully, Hürren Narbanu pondered for an instant, then spoke quite firmly.

"I'm not going to look back. The problems of immigration that bedevilled us for so long, and the wranglings over enlargement, first my beloved Turkey, then the group of Southern Mediterranean Shore countries, are largely behind us. What I look forward to is an integrated Greater European Union based on a new mind-set that is built on the notion or idea that we should unleash human power and not constrain it. We should focus firmly on invention, investment, and imagination more than we do on limitation, regulation and control. The dream not the nightmare. A dream where economic growth is seen as a solution to the social and environmental hazards we face and not a problem. In political terms it is best expressed as the 'politics of possibility' as opposed to the 'politics of limits', and is founded firmly on an explicitly pro-growth agenda which defines the kind of prosperity that is necessary to improve the quality of life and tackle the ecological, ethnic and ethical crises ahead. It is a politics, above all, that joins the individuals self-interest with the common good."

"All very high-minded and democratic, if I may say so, but there are some critical challenges to be faced globally by governments at all scales in all regions if this mind-set is to be propagated. What form of governance do you deem best?"

"No size, shape or sort of governance, especially democracy, fits all." Hürrem warmed to the cross-examination. "Whether it's the neo-liberal model, like the United States, dominated by private interests and market forces; the Asian model, emphasising collectivism and centralised control; or the European model, seeking to

balance democracy and human rights with environmental concerns, social justice, technological progress and commercial competitiveness, all face a new set of challenges. Let me try to summarise some of them:

- Many features of the prevailing political systems oppose looking at the long-term.
- To date, political space has been based on geographical space this is changing.
- New technologies and new groupings are creating a tension between representative and direct democracy.
- We are moving from societies of majorities to societies of many minorities.
- There is the advent of virtual democracy in which people can participate directly in decision-making.
- We don't yet know the full implications of an information society where all activities are monitored, stored and never forgotten.
- And, we face an ageing society with potential intergenerational conflict." "What's the answer?"

"You will have to wait for my acceptance speech tomorrow for my attempt at that – but suffice it to say for now that the title is 'Collaborative Leadership – The Key to Future European integration'."

#### Box 8 – Integration in 2030

Facts – Weighed average results from surveyed countries				
38%	Because of the cultural diversity there are conflicts between single groups (e.g. Muslims, Africans, Turks).			
35%	Immigration to Europe come primarily from developing countries than from EU countries.			
35%	Most immigrants live among each other in certain districts.			
34%	In Europe one third of partnerships/cohabitations/ marriages are multinational/ multicultural.			
31%	Portable devices and telephones with simultaneous translation make communication easy.			
26%	Faith and religion play an important role in immigration politics.			
25%	The integration of immigrants is easier.			
23%	In most European countries integration works only with educated immigrants.			
21%	Many European countries encourage immigration in order to counteract the aging of society.			
18%	In order to counteract people's fears Europe has closed its borders for Non-Europeans.			
10%	None of these statements will have come true.			

Comparative Findings					
- Finland, France and Russia have been able to reduce conflicts between groups of immigrants.					
- Switzerland and Italy hold the highest rate of multinational and multicultural couples.					
- Portable devices for simplifying communication between foreigners are widespread in Finland and France.					
- The integration of immigrants is easier in Finland, UK and Russia as opposed to Germany and France.					
- Finland and Spain distinguish themselves for counteracting the aging of society by encouraging immigration.					

<sup>&</sup>quot;One very last question – what do you do now?"

"Well, apart from the rather clichéd response of 'spend more time with my family', I intend, somewhat pretentiously, to devote a significant part of my public time towards the embryonic

New European Party, whose rallying call, as you know, is 'Awareness, Adaptation and Activism'."

"I understand the 'Awareness' and 'Adaptation' bit, but what do you mean by 'Activism'?"

"'Activism' involves the transformation of belief. Here hope rules. As long ago as 2008, Richard Eckersley, a leading Australian researcher on progress and well-being, described an activist approach as reflecting the desire to create a new conceptual framework or worldview - stories, values, beliefs - that will make a sustainable, equitable future possible. Over the past couple of decades social surveys have progressively shown that growing numbers of people are making a comprehensive shift in their worldview, values and way of life. Rejecting contemporary lifestyles and priorities, they place more emphasis in their lives on relationships, communities, spirituality, nature, the environment and ecological sustainability. Some, like myself, link this to a new kind of economic development made possible by bold and novel investment – a new capitalism - a Natural Capitalism. But the real appeal of activism lies in its sense of empowerment and possibility, and in the collective identity, unity and support it provides. All my working life I have been influenced by the global development Paul Hawken first described in his seminal text Blessed Unrest as the largest social movement in history. A movement that is not hierachical, has no manifesto and espouses no single doctrine. It is not so much trying to save the world as trying to remake it. Metaphorically speaking, it is humanity's immune response to political corruption, economic disease and ecological degradation. If I remember rightly, Hawken himself described the movement as not merely a network, but a complex and self-organising system. This system is made up of more than a million organisations with roots in the environmental, social justice and economic reform movements: research institutes, community development agencies, citizenbased organisations, corporations, networks, faith-based groups, trusts and We're all part of it - and we're all contributing to the Grand foundations. Transformation."

"Dr. Nurbanu – thank you – it has genuinely been both a pleasure and a privilege to talk to you. May I wish you well for tomorrow?"

Hürrem half-smiled and nodded graciously. Tomorrows' ceremony would certainly represent a most memorable milestone for her, and record a small way mark in the annuals of European empery. But surely, she thought, as Churchill had long before her: "the empires of the future will be the empires of the mind".

#### Future Retirement Age in OECD Countries: A snapshot from a 2008 survey in selected European countries<sup>1</sup>

Pierre-Alain Schieb

Surveys and opinion polls are not typical tools in the actual work of professional futurists. Trends analysis, identification of drivers, drafting of scenarios, and meetings of Delphi or focus groups, are much more in use. Therefore, it is tempting to look at results of a survey targeting European citizens and to try to understand the meaningfulness of such a survey and the potential implications of the opinions that are expressed.

The so-called Pan-European Future Study of European Opinion and Perceived Risks aimed at collecting views about a number of topics such as work, relationship between poor and rich, education, environment, consumption and integration as they might be described in 2030 terms from the perspectives of citizens of 8 European countries (Austria, Finland, Germany, Italy, France, Spain, Switzerland, UK) plus Russia, who have been interviewed during the first semester of 2008.

As the coverage of the survey is very large (with around 60 items in the questionnaire), I have chosen to focus my comments on views about long-term prospects on retirement age, economic status of future retirees and economic consequences for actual workers. This is a theme highly discussed within the OECD walls, and the survey, although limited to selected European countries, can provide an interesting input about where opinion stands today and what it could mean.

After reporting about results on this particular theme in European countries (excluding Russia), the second part of the essay will deal with comments and potential explanations about the overall tone conveyed by the survey and the third part will put the results and comments within the context of longer term prospects as analysts currently see them.

#### Are the European respondents pessimistic about retirement prospects?

The coverage of the theme can be mostly traced to 6 questions within the block of questions related to work (4 questions) and the block related to relationship between poor and rich (2 questions). Other supporting questions can also be identified under the block on consumption (1 question) and under the block on integration (1 question).

The overall 8 statements are the following:

In 2030:

Many employees have second or side jobs

Most employees have to work up to the age of 75

Full employment is possible because of the declining population

1 Views and comments expressed in this essay do not necessarily represent the views of the OECD or of OECD Member Countries.

Because of automation most people work less than 25 hours a week

Many employees do not earn enough to save money for retirement

Old age poverty is an unsolved problem

Everyday products (e.g. food) are significantly more expensive

Many European countries encourage immigration in order to counteract the aging of society

Each statement in the above list is given a plus or minus to indicate the trend of answers, i.e. the degree of approval of the statement. Although there is a rather significant level of diversity among the respondents of the 8 countries, a consistent picture emerges from the table and it can be summarised in the following terms. In 2030, the retirement age is likely to have changed towards a longer active life.

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In 2030, the retirement age is likely to have changed towards a longer active life. According to the survey, it looks as if it is not on a voluntary basis that workers will work to the age of 75 but as a highly constrained process due to economic conditions at the time of active work and then at the time of retirement: earnings are too low to guarantee a future decent standard of living when retired, you must work on the side to make it when active; cost of living even for basic products rises higher and higher; old age poverty will not be solved. On top of this, the aging of society is not parallel to innovation/productivity gains that would allow working less on a weekly basis, nor to more open immigration policies.

Without going too much into interpretation, it seems that a significant part of the sample of respondents is presenting a rather bleak image of future retirement prospects in Europe around 2030 and their consequences for today's employees.

The underlying rationale seems to question the pace of innovation (not enough automation, affordability issues for food products) and some degree of failure of public policies (poverty issues) which would lead to the need for more individual efforts. As a side comment, pessimistic views about the role of governments to guarantee a minimum level of income and views about technologies and pace of innovations are also to be found elsewhere in the questionnaire.

#### How pessimistic are the views of Europeans?

Pessimistic or optimistic views entail the notion of a deviation from a benchmark, be it the actual situation, an ideal target, evidence-based projections or comparison with, for instance, other countries. In this section, an assessment of the views expressed by the sample will be attempted under different dimensions.

#### Methodology:

As already stated, surveys with the help of questionnaires usually raise some ad hoc questions. The scope of sample size and composition, context and modalities of the survey can lead to biases. In this particular case, the wording of questions can be

discussed: for example the question, "most employees have to work up to the age of 75" can be seen as rather inductive. What if the statement had been "most employees have chosen to work up to the age of 75"? Other potential biases will be discussed below.

#### Diversity between countries:

Although the title of a survey is a pan-European one, not all European countries have been surveyed. And although the overall picture is described as rather pessimistic, there are significant variations between European countries. While it is difficult to come up with clusters of countries, countries from Southern Europe such as Spain and Italy look less pessimistic or are more optimistic than the other countries. Germany, France and Switzerland sound more optimistic, with the UK and Finland being in the middle of the road, although the UK has the highest rate of respondents claiming that they will have to work up to the age of 75.

#### Composition of the sample:

Views from actual retirees can dramatically change the picture as opposed to views from future retirees. Two examples can be put forward.

In a cross-national survey done in 1997 and reported to the OECD in 2000<sup>2</sup>, people already 65+ of age were asked about their preferred working situation. As can be seen in the following table, out of 8 OECD countries including Canada, Japan and the USA, all but the respondents from Netherlands, expressed a preference for a full or part time job if they could decide on their work situation at present.

Table 1 Preferred Working Situation

	GER	GB	USA	ITL	NL	SWE	CAN	JPN
A full-time job	57.0	31.5	24.9	36.5	32.3	45.0	20.5	39.2
A part-time job	19.1	21.9	27.5	46.6	13.9	33.7	30.0	16.9
A job less than 10 hours a week		8.3	14.8	2.7	3.5	9.0	12.7	14.8
No paid job	18.5	38.3	32.8	10.4	31.3	12.4	36.8	29.1

Source: ISSP 1997

Wording: Suppose you could decide on your work situation at present. Which of the following would you prefer? Can't Choose responses not shown.

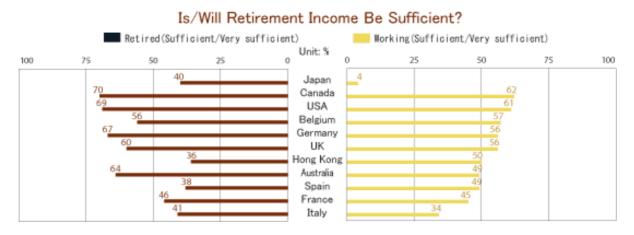
The results of this cross-national survey is also illustrative of the fact that respondents from 4 European countries out of 5 (i.e. Netherlands) expressed at the time a much

<sup>2</sup> A cross-national comparison on attitudes towards work by age and labor force status, T. W. Smith, National Opinion Research Center, University of Chicago, December 2000, OECD Working Paper, Excerpt from table 7.

more positive attitude towards maintaining an active working life than counterparts in Canada, Japan, and USA, which would contradict the pessimistic tone of Europeans.

More recently (2005), a survey performed in Japan and other OECD countries showed similar results<sup>3</sup> regarding the difference of views between actual and future retirees. When comparing the views of working people with the views of retired people, the results from working people are more pessimistic. 40% of retired people expressed that pensions are "completely sufficient" or "sufficient" as opposed to only 4% of the active people when judging their future situation.

Table 2: Is/Will retirement Income Be sufficient (Survey in Japan and other OECD countries)



#### The case of transferring life-expectancy risks to individual retirees?

A recent work (2007) carried out by the OECD<sup>4</sup> asked how the huge diversity between OECD countries in the way life-expectancy risk is shared might impact the level of transfer of those risks to individuals.

The question is worth raising since it is assumed that a continuous increase in life expectancy creates a financial burden for retirement income systems. As a result of the study, it was found that already two-thirds of OECD countries have introduced reforms that will automatically link future pensions to changes in life expectancy, and that the case for transferring risks to individual retirees is strongest in countries with the largest compulsory pensions. However I found no significant correlations between the views expressed in the Pan European study to the question "most employees have to work up to the age of 75" and the level of risks to be borne by individuals under current regimes in the different countries.

4 Life-expectancy links: the quiet revolution in pension policy, OECD, 2007 and Whitehouse, E. R. (2007), "Life-expectancy risk and pensions: Who bears the burden?, Social, Employment and Migration Working Papers, No. 60, OECD.

<sup>3</sup> Hirano, Junko, Japanese perception on retirement based on the findings of two international surveys, Nagaoka University, 2005.

#### Table 3: Who bears the risk?

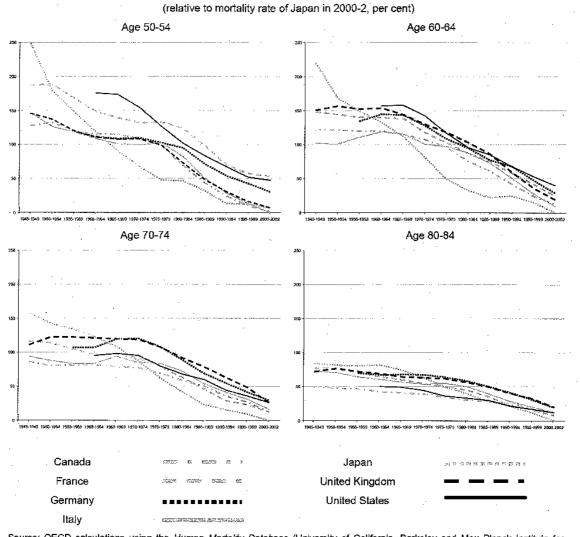


Figure 2 Changes in mortality rates for men by age and period, G7 countries, 1945-2002

Source: OECD calculations using the *Human Mortality Database* (University of California, Berkeley and Max Planck Institute for Demographic Research).

As can be seen when comparing Germany and Italy, the risks are twice as high in the case of Italy than in Germany and the respondents in Italy seem to be more optimistic about the need to work at age 75 than the German respondents. It can be suggested that explanations about difference in attitudes between countries cannot be found in projections of the risk level that individuals will have to bear.

#### Net replacement rates?

Perhaps a more straightforward explanation of difference of perceptions between countries can be found in replacement rates from public pension schemes in OECD countries?

Here again we can quote recent OECD work<sup>5</sup> about net replacement rates in OECD countries.

<sup>5</sup> Pensions at a glance: public policies across OECD countries, 2007.

#### Table 4: Net replacement rate in 10 OECD countries (average earner)

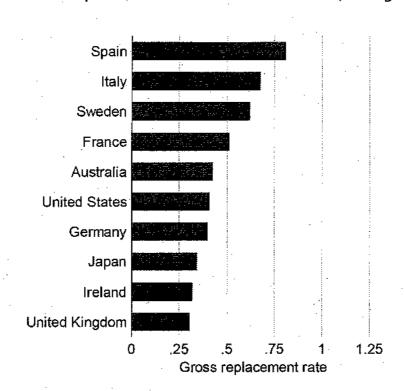


Figure 1. Net replacement rate in 10 OECD countries, average earner

Source: OECD Pensions at a Glance

Three main lessons can be drawn for our purposes in this essay:

- a) net replacement rates in Europe from public pension schemes are greater than replacement rates in non-European countries such as the USA and Japan, which should provide for less pessimistic views in Europe.
- b) European OECD countries with the lowest net replacement rates, such as the UK and Germany, express pessimistic views. However, countries such as France and Switzerland, with better replacement rates and better views about the active role of governments, are also in the high negative segment.
- c) the only congruent results can be mentioned about Italy and Spain if one would like to correlate the more relative optimistic views they expressed with the very high net replacement rates they enjoy.

After trying to shed light on the results of the 2008 pan-European survey, we are in a position to derive a few partial conclusions:

- a one/off survey is difficult to interpret when it comes to the perception of the future since no direct comparison over time can be offered.
- a multi-country survey is surely better than a stand-alone national survey, but here again an OECD-wide survey would allow more room for comparisons.
- composition of the sample and wording of questions in questionnaires play a strong role and must be taken into account before any direct interpretation of results.

- diversity of views across European countries is difficult to explain when taking into account different angles regarding the actual and future potential status of retirees.
- tentative comparisons with non-European countries such as Canada, USA and Japan, show that Europe sounds more pessimistic. However, that could be explained by the new circumstances with which European respondents have to cope.

### Longer-term prospects for retirement in the OECD context or where respondents are right

As a matter of fact, European and non-European OECD countries have to cope with different circumstances than during the previous three decades regarding retirement age and economic status of actual and new retirees. Old-age dependency ratios are increasing sharply, creating a number of challenges. And it can be argued that macroeconomic and microeconomic consequences can be felt across the board, whatever the pension schemes in place or the transitions between systems. Eventually, two drivers will be key towards 2030: the level of economic prosperity in OECD countries, the impact of reforms and public policies.

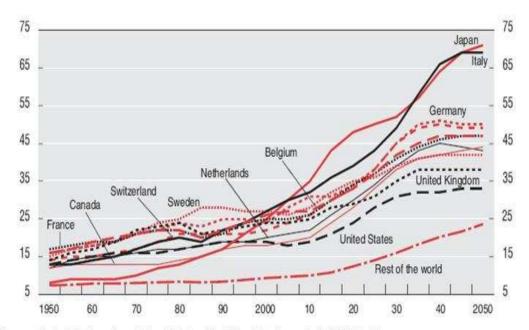
As a result of a rise in longevity and lower fertility rates, a process of rapid ageing population is taking place in OECD countries. In some cases (Italy, Japan) it is even irreversible regarding the projected size of the working age population for the next 25 years since new policies or attitudes would have no effect until new babies reach adulthood. In some other cases (UK, USA), the effect is partially compensated by an increased level of immigrants but overall the situation is going to significantly deteriorate old-age dependency ratios. <sup>7</sup>

<sup>6</sup> Within the framework of the OECD International Futures Programme, trends and scenarios about 2030 will be discussed in December 2008 on the prospects for Future Migrations Flows to OECD Countries since the demand/supply context might significantly change.

<sup>7</sup> Ageing and Pension System Reform, Implications for Financial Markets and Economic Policies, Financial Market trends, Volume 2005, Supplement 1.

#### Table 5: Old-age dependency ratios are increasing sharply

Figure I.1. Old-age dependency ratios are increasing sharply
Ratio of the population aged 65 years or over to the population aged 15-64, in per cent



Source: United Nations Population Division, World Population Prospects: the 2004 Revision.

As a result of the sharp increase of old-age dependency ratios, conventional thinking is that the decline in labour force and demand from consumers will create a slower GDP growth rate and therefore less room to accommodate increasing social costs, infrastructure needs, R&D investments. But the main direct effect is to create a financial burden for most of the publicly-financed pension schemes.

Table 6: Ageing-related public spending pressures are mounting

Table I.1. Ageing-related public spending pressures are mounting
Assuming unchanged policies as from the early or mid-2000s, in per cent of GDP

	Old-age per	ision outlays	Health and long-term care spending		
	Circa 2000	Circa 2050	Circa 2000	Circa 2050	
Belgium	9.0	13.0	6.3	10.6	
Canada	4.7	6.4	6.3	10.5	
France	12.1	14.5	6.9	9.4	
Germany	11.8	13.8	5.7	8.8	
Italy	14.2	14.4	5.5	7.6	
Japan	7.9	8.5	5.8	8.2	
Netherlands	5.2	8.3	7.2	12.0	
Sweden	9.2	10.8	8.1	11.3	
Switzerland	7.2	10.8	5.8	10.3	
United Kingdom	5.0	5.6	7.9	11.0	
United States	4.4	6.2	2.6	7.0	

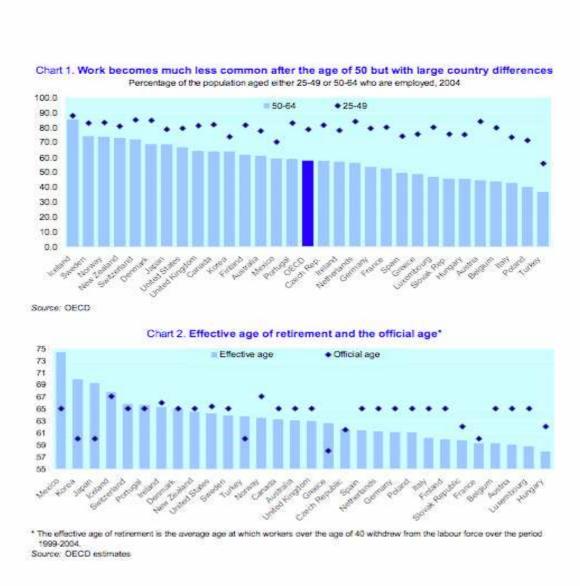
Sources: Dang et al. (2001); Casey et al. (2003); for Belgium, Comité d'Etude sur le Vieillissement (2005); for Canada, Office of the Chief Actuary (2004 and 2005); for pensions in France, Germany, Italy and the Netherlands, European Commission (2005); for Switzerland, Schluep (2003) and Federal Office of Public Health; for the United Kingdom, HM Treasury (2004).

Three of the many consequences of such a context are that:

- a) publicly financed pension systems must be reformed to stay or become financially sustainable, and this usually means a less generous level of pension benefits;
- b) undersupplied financial instruments have to be provided to help accommodate retirement savings and the provision of pension benefits, including the building up of private pension systems. This usually means that individuals have to contribute actively on their own during their active life; and
- c) living longer must also mean working longer, and this usually means a double gap with existing expectations of current regimes.

One might find some rationale for European pessimistic views regarding the retirement age since the gap between the actual situation (for the previous generation and most of the baby boomers) and the future situation might imply a "double jump". By "double jump", one can refer to the fact that in many OECD countries, particularly in Europe, the actual retirement age is far below the official retirement age (in OECD countries less than 60% of people aged between 50 and 64 have a job), which is the first gap, and that postponing the official retirement age to 67 or even cancelling the concept of official retirement age could mean a second gap to close.

### Tables 7 and 8: actual retirement age versus official retirement age, the basis for a potential double jump



Advocates of a longer working life use several arguments. Amongst them, the fact that it would be unfair to maintain the existing official retirement age and maintain the same level of benefits as in the past by asking the next generation to pay for it, and the fact that 91 to 93% of the population in OECD countries within the age segment of 65 to 74 are in sufficiently good health to continue to work. Of course, workers themselves can change attitudes towards working longer and acquiring new skills, but public policies and workplace practices need also to change postures and shift to incentives rather than discourage work.

Such evidence-based analysis of the actual and longer term context might help conclude that it can be legitimate for the respondents to the Pan-European Future survey to identify potential concerns in the future of the retirement age and status, and to consider some immediate implications for the active workers.

However, one question related to the level of expressed European pessimism stays unsolved and it is the question of some kind of expressed lack of confidence in the future and individual role and responsibilities. In a survey conducted in the aftermath of the events of 11 September 2001 in the USA, questions were asked about the financial strategy for retirement and the role of the government<sup>8</sup>:

- o 63% of respondents were more or equally confident in their financial strategy for retirement after the economic downturn (IT bubble burst) and the events of the past few months (9.11), and at the same time
- o 79% of the respondents somewhat or strongly disagree with the statement: "I can rely on the government to pay the costs of my long-term care needs".

Only in-depth interdisciplinary analysis could help answer the actual and perceived differences between OECD countries in this respect, and it is not the purpose of this particular essay to try to provide a hypothesis. It can, however, be assumed that the transition period underway in Europe is creating pressure for a new balance of burden sharing between actors that will require more responsibilities from individuals than in the past.

#### Conclusion: What's in a survey?

Two main lessons can be learned:

1. On the one hand, a stand-alone survey is not the preferred choice of many professional futurists trying to identify the trends, scenarios, possible futures and their implications for policy or decision makers. Interpretation is difficult, numerous biases have to be taken into account, and meaningfulness can be discussed. Surveys would be more useful if repeated over time and made comparable across a large number of countries, so that one can interpret the direction of changes, if not the order of magnitude of differences, between countries or segments of the population.

8 The METLIFE Survey of American Attitudes Towards Retirement: Has Anything Changed? Mature Market Institute, METLIFE, January 2002.

2. Some substance and messages: in the case of retirement age and related issues, the Pan European Future study in Europe helps identify the concerns that respondents are expressing, even if significant differences exist between countries. As discussed in the essay, there is both some reality in the concerns and also some kind of over- or under-assessment of what is the actual situation. Of course, face-to-face interviews and open-ended questions would have been helpful. Nevertheless, one potential lesson for public and private decision-makers is that more information and transparency are needed in this field.

Another survey might well highlight that most European people do not have clear views of the existing pension schemes, of the reforms already made and about the options (both options for collective and for individual choices). As a working hypothesis for a test about the lack of information readily available, how many European citizens actually understand the geographical scope of the portability of their pension schemes and the portability across regimes?

# Europe 2030 – Reflections on the Pan European Future Study Johan Peter Paludan

The "mantra" for futurists, at least for the one writing this essay, is that the future does not exist because it is the result of actions and decisions that are decided from this moment onwards and therefore cannot be predicted. On the other hand, it is necessary to have an idea of what the future has in store because this is where the decisions being made today need to work.

There is a greater possibility for wild divergence from the present the further out we try to visualise the future. The year 2030 for example, 22 years from now, is quite far out in the future. The writer of this article, should he still be alive, will be 86 years old by then! To visualise Europe in the year 2030 is an ambitious task, taking into consideration not just the long-term aspect but also the fact that it is a very complex undertaking indeed.

This interview survey, The Pan European Future Study, is probably the most feasible and effective way to tackle the question of Europe in the year 2030. Elsewhere, due to the increasing complexity of the issues and the need for a quick result, others have chosen to use "the wisdom of crowds" – i.e., instead of costly, drawn-out investigation and analysis, one asks those related to the issue at hand what are the facts in a given question. This is much more relevant in the future-orientated problem formulation that Europe 2030 raises: we are talking about democratic systems here, about interviewing the people that will create the Europe that will exist in the year 2030, large amounts of people in fact. Over 10,000 interviews have been conducted, and because they have to be representative, they says a lot about what people think and mean. "The truth is something we take a vote on" is not an unknown observation about the workings of a democracy; it fits very well in a Europe we know that is comprised of a variety of different democracies.

### European attitude toward the future: why?

One can ask why it is interesting to have information, quite a lot of it, about a selected group of Europeans' attitudes toward the future.

The first answer could be, because it simply is interesting. To say something meaningful about the future is extremely difficult, so any contribution in the form of data collected about what people expect for the future is very welcome.

The second answer may be that it can illuminate the perspective for developments in the advancement of Europe, continued integration or disintegration. Like when we see the breakdown of negotiations at the Doha WTO Summit as a sign that globalization has maybe reached its peak, that we risk it being rolled backwards in the wake of a bad economic climate, hence the Irish rejection of the Lisbon Treaty can be seen as a possible sign that European integration has reached a pinnacle. Is it the long-term economic stability that has ensured, up to now at least, the continuation of the integration process (and globalization, which is also an integration process)?

The problems start to appear when economic climates change. Are the growing numbers of EU members too separate and different for the continued success of the integration process? At the moment there are "mutinous tendencies" among certain elements of the Danish political system in response to an EU Court of Justice verdict that appears to meddle in Danish immigration policy. On the one hand, one can say

that the European project up to now has been a success. The EU has expanded through the years and many countries still want to join. On the other hand, one can say that the more the EU expands, the greater the dispersion. This interview survey can possibly be the beginning of a deeper investigation into how great the differences are in the respective countries.

A third answer could be that this survey will enlighten us about the present. This corresponds to this futurist's view that the real mission of futures studies is to bolster decision-making in the present. Most people have a tendency to view the future in relation to their own immediate reality. This can maybe explain the somewhat pessimistic future predictions. The interview survey was conducted during a period of powerful price increases, real estate devaluation and judgment-day predictions about the impending economic downturn.

### European attitude toward the future: how?

The selection of interviewees is representative of the respective countries in which they live. The selection of countries is, on the other hand, not representative of the EU or of Europe, regardless of how one defines Europe. It can seem thankless when futurists are handed so much information with which to enlighten the future and then complain, but it should be said that when we talk of Europe in the year 2030, there are at least two types of countries that one would like to see included, apart from those already represented.

First is Eastern Europe (or as these countries want to be called, Central Europe). Russia is included, though a more nuanced picture could have been obtained, if just one of the former communist countries had also been included. They are members of the EU now and possess a more optimistic approach to the future than the traditional EU members that are involved.

Second is "spoiled" Scandinavia and maybe also the Netherlands. Rich, small countries like Denmark, Norway and Sweden have a different view of the future than the rest of Europe. It may seem somewhat narcissistic, the author being a Dane, to mention that for as long as the EU has been measuring happiness, the Danes have been the happiest Europeans. A French survey recently pointed out that Danish youth had a higher optimistic outlook for the future than the other European countries that were surveyed. Only American youth had similar results to the Danes. In other words, we lack examples of what Stefan Bergheim, Deutsche Bank, calls "happy capitalism". One could be expected to think that Finland's inclusion was enough for Nordic representation; however, Finland has a different past and a more recently attained economic well-being. Expectations for the future are, in many cases, based on the interviewees' own historical experiences.

If the choice of countries seems one-sided then it must be said that the questions must have been appropriate and articulate and not misleading. If you look at the "none of these statements will have come true" category answer, that closes each group of questions (work, relationship between rich and poor, education, etc.), then it is a characteristic that there generally are only a few that cannot even consider the outcome of any of the prospects as probable. The exception is Italy and to a lesser extent Austria, who are consequently more sceptical with regard to this question than the other countries. An explanation could be that the questions are too "tame" and obvious. This, however, seems highly unlikely given that 12% of all those surveyed believe that in 2030 it will be possible for meteorological stations to

generate sun, rain and snow when needed. Talk about wars over resources in the future! It is more likely a sign of considerable future imagination than of a banal question. Another explanation could be that they wanted to be friendly with the interviewer. A third could just be a healthy imagination. If that is the case, then one can possibly say that Italians and Austrians are less imaginative or less friendly than the rest of those interviewed. Using this primitive train of thought then, the French and the Swiss are the most imaginative and friendliest of those interviewed! How does that fit into your current prejudices about different nationalities?

Ultimately, it should be stressed in this introduction that the interview survey generated extensive data, and therefore the possibility for further and deeper analysis is clearly evident. There are endless possibilities for juggling with the data in order to establish cross-references as the basis for interesting contexts. Though not being a mathematical genius, this writer can sense that there are enormous possibilities for further study of this material. The perspective is that if he lives long enough, then his failings in this area will not matter. Advances in information technology point to a not-too-distant future where thinking and hypothesizing for relevant patterns in large amounts of data will not be necessary; increasingly intelligent software will be able to manage this. Until then, a more "primitive" and superficial approach will have to suffice.

### Top probabilities

A general and rough picture of European thinking about the future can be had by looking at what those asked in the survey consider most probable in the year 2030. It is "primitive" because it does not focus on the variations between the 9 different populations. It is also "primitive" because cultural differences are ignored. Even though the same questions are asked of all 9 populations, the cultural difference presumably lends the questions and hence the answers different value.

What then are the top ten probabilities among the 10,000 people who expressed their expectations for the future? Looking at the top 11 probabilities reveals a slightly distressing picture. It is 11 and not 10 because otherwise a choice would have to be made between Internet crime and advances for women in management, both of which 45% of the respondents considered probable.

### Top 11 probabilities

1. Everyday products will be significantly more expensive	61
2. Most couples will live together without being married	60
3. The gap between rich and poor will have become wider	57
4. Poverty in old age will be an unsolved problem	52
5. Most trash will be recycled	50
6. Many employees will have second jobs or jobs on the side	50
7. Organised crime will be a big problem in [my country]	49
8. Many employees will not earn enough to save money for retirement	49
9. Warlike conflicts over natural resources will take place	47
10. Internet-related crime will have increased a lot	45
11. More highly qualified women will assume leading management jobs	45

Economics are a predominant subject. Expectations are not optimistic.

Prices for basic staples are expected to increase; this is the most probable prospect that emerges from the survey. One cannot dismiss that rising food and energy prices during the data-collecting period may have influenced the data collected, giving rise to this bleak outlook.

Many expect that it will be necessary to have more than one job; this applies to nearly all respondents, though considerably less so in Italy and Russia, which makes one wonder: is it because they do not want to work more or is it because they imagine a second job hard to find or is it that they think that one job is enough.

The prospect of looking forward to a decent pension is slight. Poverty in old age will continue to be extensive in 2030. The prospect of working until 75 years of age was close to being in the top-11 list, and this development in particular is being looked upon with gloom in the UK, Germany and France. If one's pension outlook is bleak, then it makes sense to work until 75 years of age; that would be the traditional way of looking at it. One could turn it around and say that when we live longer, and we do, except in Russia, then it is natural to work longer. It would be interesting to see the answers to the question: "Fixed retirement ages no longer exist". This must be the consequence of a workforce moving away from an industrial society and into a deadline-oriented society with no fixed working hours. The prospect of working until 75 could be seen as optimistic in this light; however, this is unlikely.

The difference between rich and poor is on the increase. In principle, one can discuss whether this is a pessimistic or an optimistic outlook. Futurists, or those who subscribe to the same philosophy as myself, have an ambition to be "professionally neutral" – an ambition that is theoretically impossible but a very good ideal – and thus on principle cannot state that increased economic imbalance is inherently a

good thing or not. One may argue that a system characterized by inequality has a greater stimulus for development than a fairer, more egalitarian society. This is the American model. It can also be argued that a fairer, egalitarian society creates safer conditions and a more humanistic society that promotes creativity. This could be termed the North European model. Because we are dealing with popular opinion in a representative section of a chosen population, we can say that it most likely represents a pessimistic outlook rather than an optimistic one.

Finally, on the economic front we can say that expectations about increasing conflicts over resources do not represent a rosy outlook for the future. Here, again, we can see the influence of the currently rising oil and commodity prices on the general outlook.

We can take for granted that increases in crime rate are a result of increasing economic imbalance. Nearly 1% of the American population is now incarcerated. Therefore it is natural to argue that an increasing imbalance in Europe will lead to expected increases in crime levels here, as well.

Internet crime and organised crime are expected to be widespread in 2030, though not in Italy and Russia. Taking these two countries out of the equation, anxiety about crime is a very dominant dimension. In light of the normal prejudice about crime in general, and organized crime in particular, in Italy and Russia, it seems safe to say that their expectations represent a case of optimism (or a denial of reality); but in general, the outlook seems quite miserable. That the future is seen as threatening and the past looked at with milder eyes is not an unknown phenomenon. The future is that which is not over and done with yet and this writer is always reminding people who are worried about the future that it is just a matter of time before that threatening future will be transformed into the good old days.

The next issue to figure on the top-11 list is what could broadly be interpreted as "the relationship between the sexes". The prospect of living together without being married features heavily on the top 10 list. Again, one has to be careful about arriving at a pessimistic or an optimistic conclusion. Is it the prospect of a less stable family situation or the prospect of increasing individualism, or could it be increasing antiauthority and a rejection of traditions? Gender-specific issues are also expressed through the prospect of more women at management level in the workplace, and just under the top 11 there is the expectation that homosexuals can marry and adopt children. Slightly provocatively, one could say, that the expectations in this area represent a wish for a modernization or a development akin to that prevalent in Northern Europe. It is also very interesting that with all of the three issues just mentioned, France represents the peak and Italy and Russia the lowest point. Opinions are divided as to the prospect of the durability of traditions. In Italy and Russia there are no expectations of modernisation, if that is the correct term.

Finally, recycling all our rubbish figures strongly on the top-11 list. Italy – possibly influenced by the situation in Naples – and Russia are not so optimistic on these issues, but the rest of the countries have great expectations in this area. One can of course argue that this is not optimism, but rather a realistic acknowledgement of a necessary development in this area.

## Top improbabilities

Another method for attaining an overview of the large amounts of data is to ask: what do you not believe in? A confusing picture emerges.

#### Top 10 improbabilities

1. Citizens under the age of 50 will count double in elections	9
2. The income of top managers will have declined	10
3. Meteorological stations will generate rain, sun or snow where it is required	12
4. Dwelling, food, pension and pocket money instead of salary	13
5. Hunger will not be an issue due to genetically modified food	14
6. Every full-time employee will has worked abroad at least once	15
7. Service and advice will be more important than a low price	16
8. The problem of climate change will have been solved due to technological developments	16
9. There will be equal educational opportunities	16
10. Full employment will be possible because of a declining population	16

The least believable is an election system where votes from those under 50 count double. It has been debated what could be done in democratic societies to solve the issue of the ageing and "latently senile" European voter. Lower fertility and extended longevity both pull in the same direction. One could reduce the legal voting age or, as mentioned here, let the younger part of the electorate count as double. Taking away the voting right for 70-year olds could also be an option. We are pensioned off from the workplace - why not also from governing society? It is realistic to assume that this proposal can be considered highly unlikely. Too many people today are already over 50 for such a system to be implemented, at least democratically. The younger part of the electorate will argue that they have more long-term interests in society than the elderly. The elderly will counter that their experience makes them better qualified, a never-ending debate. If all stay active in the workplace longer than they are used to, and this is expected, then the problem is lessened. Those left working will not regard those not working as a great burden. However, this will eventually exacerbate the problem of younger and increasingly impatient employees waiting longer for the top management positions. This points to the need for new career patterns: Instead of today where there is no life in the company after top management. Companies and organisations will have to develop systems that ensure experience is not sacrificed just because new energy is needed at top management level.

Number two on the hit parade of improbabilities is the prospect that top level management wages will fall. Wages at this level have been on the increase for years, not least in the US where top management wages from 1970 to 2000 have increased from 11 times to more than 530 times the blue-collar average. This development also exists in Europe, and both the US and Europe seem to think that no correlation is needed between management wages and company success. One is tempted to assume that market mechanisms are failing here. Top management wages are not expected to fall. This fits well with the prospect of continued economic polarisation. One could of course be bold and ask if this fits with the prospect of an increasing

number of women at top management level. Historically, when a profession becomes an occupation for women, wages generally tend to fall.

In places 5th, 7th, 8th, 9th and 10th are further examples of what I am now tempted to call the European pessimism.

There is no belief that GMOs (genetically modified organisms) will solve world hunger. The are probably two different perceptions behind this view: 1) one should not use GMOs, and 2) use of GMOs cannot solve the problem. The first perception will most likely disappear with time and definitely before 2030. GMOs are meeting resistance from those that are always against the new. Therefore, until there is a general acceptance, the authorities' position on these types of phenomena will always be negative. Acceptance will need time, information and price increases. There is no doubt that if food prices continue to increase, then general acceptance of GMOs will speed up. Whether this will solve the hunger problem is another question. On the one hand, world population is expected to increase, and with that addition to the challenge, an increase in biofuel use pulls in the same direction. On the other hand, famine is still more a distribution problem than a question of production capacity.

Service and advice are not expected to become more important than low prices. Discount Europe has come to stay.

Neither is there much belief in technology solving the problems associated with climate change. Had the timeframe been the next five years, then it would have been a more realistic estimation. The next 22 years represent so long a timeframe that things can happen. This therefore reveals a pessimism in the interviewees' opinions.

Quite astonishing is the scant belief in equal educational opportunities. It is here that one could have wanted one of the spoiled Nordic countries included. They are of the opinion that equal educational opportunity is well and truly realised, and when the question is formulated as it is with reference to "educational programmes", it is fair to assume that this is the case. Education is free in the Nordic countries and supplemented by economic support programmes, reducing the probability of not being able to get an education due to economic factors. However, finishing an education is still an uneven pursuit. Children of academics become academics while working-class children remain working class; this, however, is due more to the home environment than the educational system. This could be used as an argument for special offers to young people who are possibly "handicapped" by their own background, but alas, this is not the issue in question. It is an incredibly pessimistic position on a question that has decisive significance for Europe for many years to come. Should Europe maintain and develop its relatively prosperous situation, then the answer is education, education and education. George W. Bush launched the "no child left behind" idea. The American results in this area are debatable, but the ambition is right. European society cannot afford to "leave anyone behind". Unskilled work is automated, and if not automated, then outsourced to other parts of the world, if that is not already the case. One could of course solve the problem by importing qualified workers, though there is very little belief in this method. Only 21% answer yes to "many European countries encourage immigration in order to counteract the ageing of society", and yet this is one of the more predictable phenomena. Europeans are not reproducing themselves, no European country has a birth rate that supports the current population. It can again seem narcissistic to refer to Denmark, but the Danish birth rate is higher than that of all the countries

interviewed. When Europeans will not reproduce or do not believe in educating the population, then it will have to import people.

Perhaps it is in the light of these considerations that one should view the last "pessimism": that full employment is not possible as a result of a decreasing population. Again, there can be many reasons for this pessimism. One does not believe that the population will decrease, and there is always the probability that the trickle from outside Europe, controlled or not, will be enough to compensate for an eventual fall in population numbers. Territories will not become "devoid of people". One may also believe – and here the pessimism regarding education comes into play – that full employment is not possible because there are too many people without the necessary qualifications for a modern labour market. This expectation fits extremely well with the prospect of increased economic polarisation and high management level wages.

#### So what?

As mentioned before: the preceding analysis is superficial. Cultural differences are lost because only a total percentage of answers is taken into consideration, thus maybe creating the basis for hasty conclusions. It is important to mention, in this case, that some of the countries in this survey also took part in the World Economic Forum's analysis of the relation between the degree of future orientation, defined as the willingness to postpone the satisfaction of needs and giving a higher priority to planning, investment and competitiveness. It is safe to say there is a reasonably clear connection: the more future-oriented, the greater the competitiveness. The countries studied in the Pan-European Future Study are spread over this aspect, from Russia – the least future-oriented and weakest in competitive power – to Italy, France, Spain, Germany, UK, and to Finland as the most future-oriented country with the greatest competitive power. Russian and Italian relative positioning reflects their position on the question of the future of the family, though perhaps this connection should not be exaggerated. It is also been said before that the answers can be influenced by the economic downturn. How much the results say about the fundamental opinions and attitudes in (the selected parts of) Europe can be debated. Here comes the conclusion that researchers usually end up with: more research is needed. In other words: the survey should be repeated.

If, in spite of these reservations, one has to conclude something, then it has to be that (the selected parts of) Europe is (are) marked by an extraordinary degree of pessimism or scepticism about the future. The explanation can of course be that people cannot handle a future that is 22 years away.

If this scepticism about the future is a fundamental characteristic, then it is quite worrying. Our expectations for the future play an important role in our behaviour, and a scepticism like this can easily lead to a passive attitude, and with that a latency for self-fulfilling prophesy. Are we talking about "old Europe", to quote Donald Rumsfeld (American Defence Minister, should one have forgotten about him)? Set in another context, specifically Europe's feelings about the invasion of Iraq, though actually referring to a classic prejudice about the difference between "the go-getting Americans" and the slightly decadent Europeans. Here the "researcher" emerges again: it would be interesting to see the American answers to the questions that the Europeans answered.

If this scepticism is a reality, it can be clarified by the global economic downturn: we are possibly on the verge of a more stagnant Europe. This is evident in the Asian attitude towards Europe. They view Europe with nostalgia and see it as a museum. One of the most significant remarks at the 2007 European Futurists Conference in Lucerne was when the Singaporean Ambassador was asked what Europe should do. His answer was "nothing". Will Europe end as some global theme park that is visited from all corners of the world, not least Asia, where they come to enjoy the sight of how it used to be before returning home to continue with their technological and economic advancement?

The apparent future scepticism in Europe can pull us in that direction.

# Europe 2030 - What does the future hold?

Georges T. Roos und Ulrich Reinhardt

Europe's future starts today. It starts in Moscow and Zurich, in Rome and London, in Berlin and Madrid, in Vienna, Paris and Helsinki. How do citizens in Europe view the future? What are their hopes? What are their fears? And what future developments leave them cold? In a tour d'horizon, we present eight core areas of relevance for the future. Factually, concisely and to the point. The future starts – here.

#### Part 1

Georges T. Roos

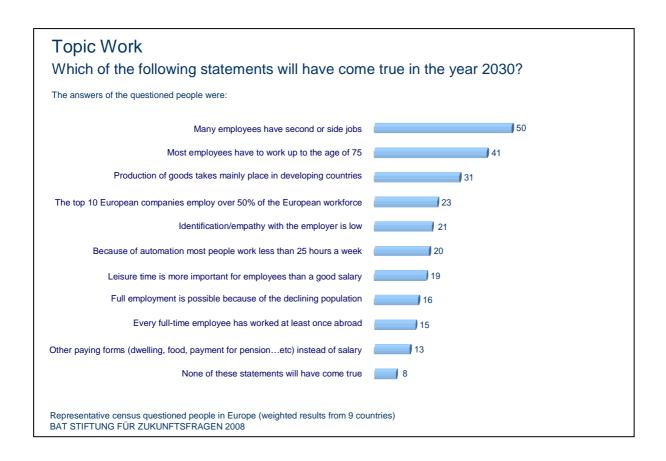
Work: We will work longer and harder – the retirement age will go up considerably – many employees will have a second job

Europe as a production location will come under pressure in the future. Around half of the Swiss (52%), French (51%), Germans (48%), Finns (48%) and Austrians (43%) believe that in 2030 most goods will be produced outside Europe. Only the Brits (32%), Italians (24%), Spaniards (23%) and Russians (18%) have more confidence in Europe as a production location, although it is interesting to note that (with the exception of the UK) these are all countries with a lower GDP per capita and correspondingly lower wage costs than the other countries surveyed. High wage and living costs are a burden on competitiveness. Europeans know that they need to raise their productivity more if they want to hold their own on the world market. Further reductions in the number of working hours are therefore not likely. Only one in five (19%) of those surveyed, for example, believes that it will be more important in future to have more leisure time than a good salary. Not even a further automation of work processes is likely to alleviate the workload: only as few as one in five Europeans anticipates a 25-hour week as a result of increasing automation. Only the Finns hold a somewhat different view, with nearly half (48%) being able to imagine having more free time instead of a fatter pay packet.

Many Europeans, by contrast, think it quite realistic that they will have more than one employer. Three quarters of Germans (78%) and Swiss (71%) and just under two thirds of Austrians (63%) assume that many employees will have a second or side job in 2030 in addition to their main source of income. In Finland (55%) this view is shared by just over, in Spain (48%) and the UK (45%) just under, half of respondents. Only the Italians (31%) and Russians (34%) buy into the idea that in future most employees will still only be under contract with one employer. There does not appear to be the expectation that portfolio working will reduce loyalty to employers. At least only one in five respondents (21%), believes identification or empathy with the employer will be lower than today.

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<sup>&</sup>lt;sup>9</sup> According to IMF estimates for 2007.

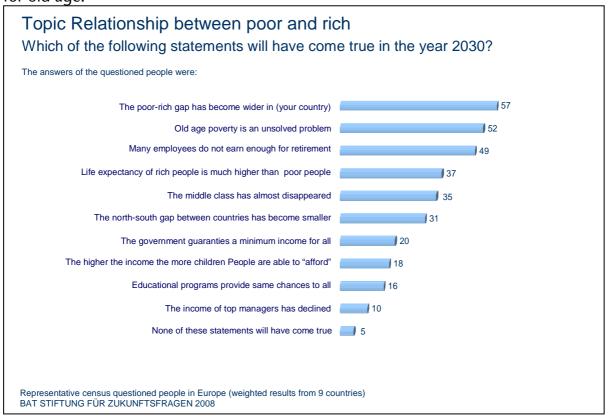


Europeans do not expect demographic change to lead to a more relaxed situation on the labour market. In particular because many assume that people will work longer in future. Two out of five respondents (41%) – among the Brits as many as two thirds (64%) and in France (56%), Germany (49%), Finland and Switzerland (45% each) around half – even consider a retirement age of 75 to be realistic. In the view of the population, globalisation could significantly influence the weight of individual corporations. Nearly a quarter of the population (23%) believe that in 2030 more than half of all Europeans will be employed by the top ten companies. Today the top ten European companies employ a mere 2 million of the workforce, so this scenario does not appear very realistic.

# Poor and rich: The gap is widening. Uncertainty over retirement benefits – income of top managers will not decline

In future the divide between rich and poor will widen in Europe. Nearly three in five respondents (57%) expect that the rich in their country will be richer and the poor poorer than today. The middle class will go to the dogs, at least this is the view of the more wealthy countries – with the exception of Finland. Two thirds of the Germans and Swiss (68% each) and half of the Austrians and French (56% and 48%) believe the middle class will all but have disappeared by 2030, whereas the Russians (18%), Spaniards and Brits (25% each) are less perturbed by this prospect. The majority of Swiss, Germans, French (all with 76%), Austrians (58%), Spaniards (55%) and Brits (50%) anticipate an impoverishment of the elderly resident population in their countries. Half of the Europeans, and especially the French (80%) and Germans

(75%), also fear that most employees will not be able to afford to put something by for old age.

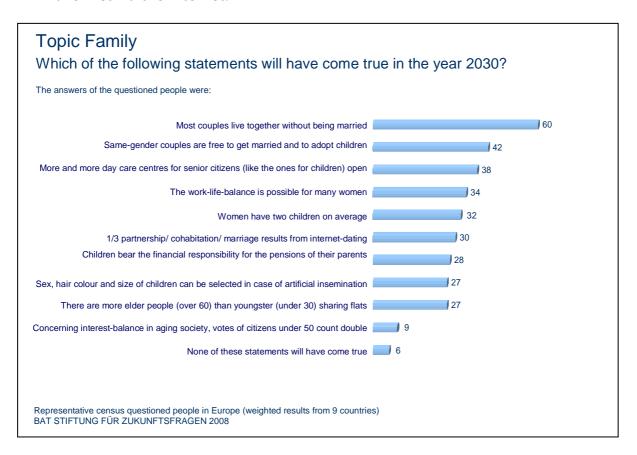


Whether the gap between rich and poor will affect life expectancy (37%) or have a positive impact on the birth rate (18%) seems unclear to the Europeans surveyed, or they do not even see a connection. However, Europeans (still) do not see the same chances available to children with academic backgrounds and those from less well-educated families in 2030 – this opinion is shared by only one in six Europeans (16%). Provision of minimum state benefits for every citizen, independent of age, gender or ethnic origin is currently the subject of public debate in some European countries. But only one in five respondents (20%) actually expects governments to have introduced a minimum basic income by 2030. The upshot is that Europeans anticipate that the social climate in Europe will deteriorate, especially since only a negligibly small minority (10%) expect inflated manager salaries to soon be a thing of the past. But the rich-poor divide is not only widening in Europe. Expectations that the prosperity gap between industrial and developing nations will narrow are not very optimistic. Only just under a third believe that the states of the "first" and the "third" world will move closer together.

# Family: Little conception of the aging society. Internet dating and the demise of traditional marriage

The traditional family with a marriage certificate seems to be on the way out. Three in five respondents (60%) expect most couples to be living together without being married in 2030. Patchwork families, single-parent families or an increasing number of single households are the consequence – in more and more cases, long-term marriage commitments are giving way to common-law partnerships. Nevertheless, the wish to found a family will still be high on the list in future, although more and

more people will do so later or have to juggle it with work and leisure time. Help with finding a partner could come from the Internet. 30 per cent of Europeans anticipate that more partnerships will result from Internet dating. Although Europe is divided on this issue: twice as many Finns and Germans (40% each) and even three times as many French and Swiss (62% and 58%) as Russians, Spaniards (21% each), Italians (20%) and Brits (19%) can imagine that in future at least one third of couples will have met via the Internet.



The fertility rate will not rise to two children. Just under a third of respondents (32%) assume women will have two children on average. Only the French are optimistic – and with good reason, since the birth rate in France is already above the European average. The reason for this general pessimism is partly explained by the fact that a majority do not think women will find it easier to reconcile work and family. Only a third of citizens (34%) agree with the proposition that the work-life balance will be achievable for women by 2030. Only in Switzerland are a majority (64%) able to envisage this development. Europeans differ in their opinion of whether homosexual couples will be freer to adopt children than today. While the French (72%), Finns (67%), Swiss (66%), Germans (55%), Spaniards and Brits (52% each) assume this will be the case, the Russians (21%), Italians (23%) and Austrians (43%) do not share the view that this family constellation will be more prevalent.

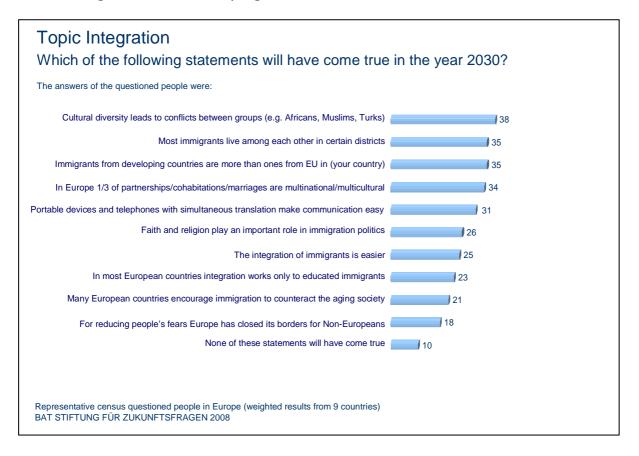
Europeans still have very little conception of living together with the growing number of older and very old family members. They neither believe they will be called on to bear more financial responsibility for older family members (28%), nor do they imagine there will be more elderly people over 60 than younger people under 30 sharing flats (27%). As many as half of Swiss respondents (49%) but only 16 per cent of Russians consider this last proposition to be likely. Day-care centres for

senior citizens – like the ones for children – are not a realistic scenario for the majority of Europeans (38%), however with a significant variance among the French (71%), Swiss (56%) and Germans (52%). Negative consensus is also reached on the proposition that measures will be taken to counter the emerging gerontocracy – elderly voters outnumbering younger ones in votes and elections. Only 9% can imagine that in 2030 votes of citizens under 50 will count double.

The designer baby, where parents can determine the sex, hair colour, height and other characteristics of their children as a result of genetic engineering is not yet a conceivable scenario for Europeans. Nevertheless a quarter of Europeans (27%) assume that such manipulations will take place in 2030.

# Integration: An ongoing challenge. Multinational partnerships and potential for conflict

The Germans, French (57% each) and Swiss (63%) show the most concern when it comes to the future of foreigner integration, affirming for example the proposition that religious and/or ethnic diversity will lead to more conflicts between ethnic groups than is the case today. An average 38 per cent of Europeans expect conflicts among immigrants to escalate – a figure which also cannot be ignored. Switzerland, Germany (53% each) and France (65%) are also the countries that generally expect to see a gettoisation of immigrants. This question produces a totally different vision of the future among Italians (15%) and Russians (17%). The majority of Europeans do not believe that the integration of immigrants will be easier in future – only one in four is convinced this will be the case. The most agreement is voiced by the Finns (49%), which can probably be explained by the much lower number of immigrants. On the other hand, only a majority of Finns believe that their country will receive more immigrants from developing countries than from the EU.



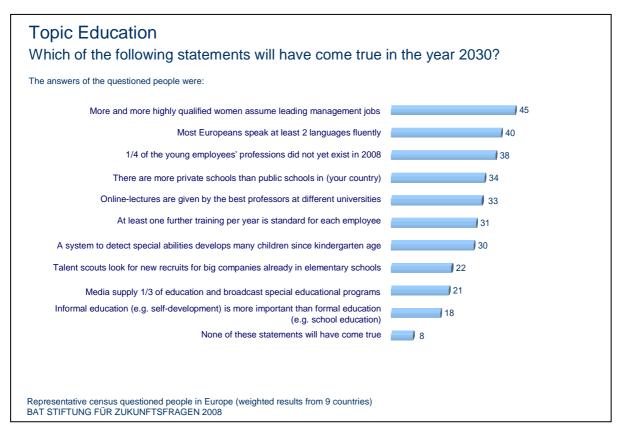
The number of multinational partnerships will unquestionably rise significantly in the future. The question of whether in future a third of all partnerships will be multinational is answered by precisely one third of Europeans in the affirmative. Again it is above all the Swiss (70%) and French (67%) who expect this development. By contrast with the rest of Europe, Switzerland (44%) and France (45%) are also the only countries to believe that integration can be improved through more education. This value is almost twice as high as the European average (23%). The rest of Europe seems to be at something of a loss or fails to recognise the vital importance of education as a decisive pillar of a successful integration policy.

It is also striking that Europeans do not expect their governments to promote an active immigration policy: Europe will not close its borders in order to reduce people's possible fears of an influx of foreigners – only 18% expect this – nor is immigration actively encouraged to counter the problem of an aging society (21%).

# **Part 2** Ulrich Reinhardt

### Education: Lifelong learning. Online or on a private basis

"Anyone who gives up learning in future, might just as well give up living" (Opaschowski, 2008, page 449). Education will become a key resource for all nations, but also for all individual citizens in the 21st century. Europe's citizens must recognise that voluntary further education – lifelong learning – is becoming a matter of course. The rapport between lifetime and learning time will be redefined: those who do not continue to learn will not advance in life either. So far this has been understood by the Swiss (52%) and the French (62%). In both countries, the majority of inhabitants are of the opinion that employees will receive advanced training at least once a year as standard. By contrast, only around one in six Spaniards (16%) and only one in four Italians (25%), Russians (24%) or Brits (25%) believe this to be a necessity.



Communication skills will be a core competence in the 21st century that hardly anyone can afford to be without. Europe is growing together, the borders are being abolished, more and more companies operate globally and employ staff from different countries. The ability to speak at least one foreign language is a prerequisite in many occupations, something which the majority of the population have so far failed to recognise, however: only two in five Europeans (40%) believe most of Europe's citizens will be bilingual. This result is surprising. Whereas in the past it was a hallmark of Europeans compared to Asians and above all Americans that they understood and spoke a number of languages, they are now at risk of international isolation. And gaping differences can be ascertained within individual groups of the

population. The higher the education and income level, the more agreement there is over multilingualism. On the one hand this underscores the need to speak several languages more highly qualified professions; on the other hand it also reveals a further divide within society.

There is general agreement that the importance of television and the Internet in imparting knowledge will grow significantly in the coming decades. The best professors will deliver online lectures simultaneously at a variety of universities – this is assumed by one in three Europeans (33%). The advantages of this for students are obvious, the consequences for professors on the other hand not yet foreseeable. Yet shifts towards research, a broadening of horizons or in-depth study possibilities could open up new, unimagined possibilities for university staff, which would benefit the European research area. The role of the media will in future have to be redefined. Passive exposure after work will only be one area of media programming. Those who restrict themselves to this kind of consumption are likely to pale into insignificance. The power of the media must be leveraged in particular to instil a motivation to learn among those groups of society that have previously only had limited access to education. After all, more than one in five citizens (21%) believe that the media will be responsible for a third of the education offering.

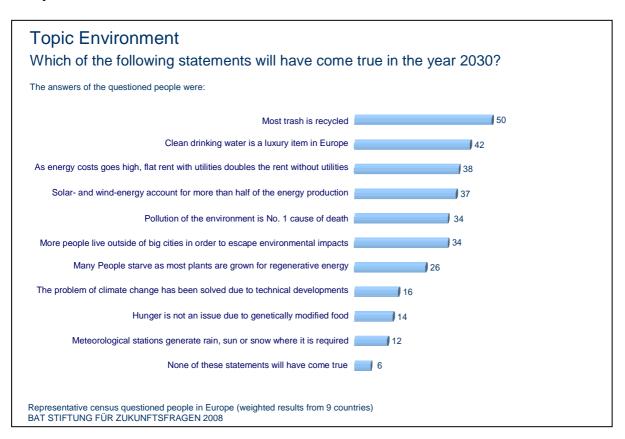
The future is female. Even today, in many countries the majority of university or college graduates are women. They days when only a minority of women attended university or college are definitely a thing of the past. The consequence of an increasing number of women among the educational elite will soon be apparent: more and more women will occupy leading management positions in companies. Europe is divided on this issue: in countries like Finland (74%), Switzerland (75%) or France (78%), three quarters of respondents expect this to be the case, whereas in Russia (23%) and Italy (27%) only around one in four agrees with this proposition. Interestingly, in both of these countries the differences between women and men are not very significant.

Private schools are gaining popularity in all European countries. Whether this has to do with PISA results, rising criminality at state schools or the hope of better promotion: those that can afford it no longer send their children to state schools. In Germany, for example, one in thirteen schools is privately funded. For the future, Europeans expect the number of private schools to grow considerably. Over a third (34%) believe that in 2030 there will be more private than state schools. Above all the Russians (42%) feel their country will be affected by this trend, while only half as many Finns (22%) by contrast see a boom in private schools in their country. The danger of a further rift in society due to the proliferation of private schools can only be countered by a comprehensive and continuously improved education policy. Governments in Europe are called upon to create the necessary conditions for this and thus adapt to an ever faster-changing world.

# Environment: Water as a luxury commodity. Exodus from the cities and little hope of an end to climate change

Climate change has many impacts: a rising sea level, shrinking glaciers, a growing hole in the ozone layer, floods, melting ice poles or periods of famine and drought. Europeans' hopes that technological developments might help to halt climate change are not high. Only 16 per cent believe in such a solution. This proposition meets with the most agreement in France (24%), possibly in reaction to the planned

shutdown of all coal-fired power plants in favour of nuclear power, which already generates four fifths of France's electricity requirement. The French nevertheless are not placing great hopes in a better environment, as is reflected by the belief of half of the population that environmental pollution will be the number one cause of death in 2030. In countries like the UK or Germany, this fear is expressed by only half as many.



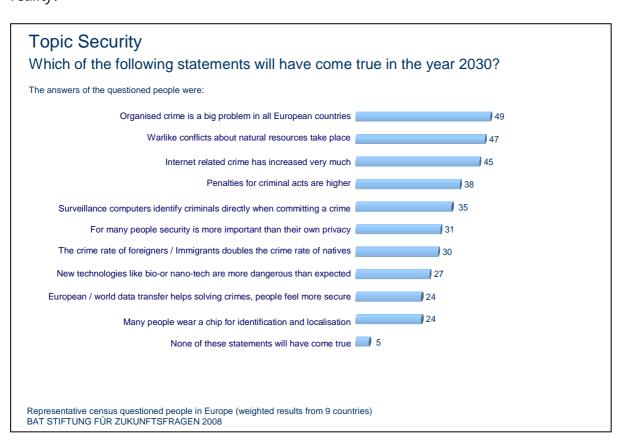
In some European countries there is a growing awareness that clean drinking water will become a global problem in future. Reflecting this, the view that clean drinking water will soon become a luxury commodity even in Europe is held by the majority of Finns, (54%), French (62%) and Swiss (54%). The Brits (23%) share this fear in only half as many cases and are also less worried about a rise in the cost of living due to a reduction in available resources. By contrast, two thirds of Germans (64%) fear that they will be paying the same amount for energy costs as they pay for rent. This is a development that is shared by only 16 per cent of Italians. Three in five Swiss (60%) and French (59%) place hopes in inexpensive, regenerative energy sources such as solar or wind power. In countries like Russia (23%) or Italy (24%) by contrast, not even one in four believes this to be a viable possibility.

However, many Europeans also see development potential in the environmental situation. Half of respondents (50%), for example, believe most of our rubbish will be recycled. In Finland (79%), France (77%) or Switzerland (77%), this met with the approval of as many as three quarters of the inhabitants. Around one in seven or one in eight Europeans expects that the problem of hunger will be resolved through genetically modified food (14%) or that highly advanced weather stations will enable us to influence the weather in some way (12%). The highest expectations in this regard can be seen among Russians (16%), in marked contrast to the scepticism of Germans (7%), Italians (8%) or Brits (7%). The future of metropolitan regions is

viewed differently across Europe. For example, three out of five French people (59%) expect a majority of city dwellers to migrate back to rural areas in order to escape from the environmental impacts of the inner cities. Cities like Vienna, Moscow, Rome or London, by contrast, will probably not experience this development: not even one in three in these countries adheres to the opinion that we will see an environmentally motivated exodus from the cities.

## Security: Fear of criminality. "Big brother" state or personal freedom

"The telescreen received and transmitted simultaneously. Any sound that Winston made, above the level of a very low whisper, would be picked up by it; moreover, so long as he remained within the field of vision which the metal plague commanded, he could be seen as well as heard. There was of course no way of knowing whether you were being watched at any given moment." (George Orwell, 1984, page 6). Will Orwell's visions from 1949 become reality? For the majority of Europeans, cameras in department stores and petrol stations, museums and sports stadiums, railway stations and inner cities are already a matter of course. Protection and security appear to be more important than worries about constant surveillance and an invasion of the private sphere. Just under one third of respondents (31%) at least already consider personal security to be more important than protecting the private sphere and one quarter (24%) could also imagine wearing an electronic chip for identification and localisation in 2030. For more than a third of Europeans (35%), surveillance technology will have advanced to such an extent by 2030 that criminals will be able to be identified in the very act. Among the French, nearly two thirds (63%) even agree with this proposition. The idea is also espoused by the majority of Swiss (55%) and Finns (55%). One thing is clear: George Orwell's visions are not far off becoming reality.



Organised crime remains an unresolved problem in Europe. Every second European (49%) from London to Rome, from Madrid to Berlin, from Helsinki to Zurich and from Vienna to Moscow puts this concern first. Will we soon be facing (Latin) American conditions? Will whole residential streets and housing estates in Europe soon be patrolled by private security services? And who will be most affected by this? Three out of four Swiss (73%) are worried about their security, as are two thirds of Germans (68%), Finns (67%) and the French (63%). Almost half of all Europeans (45%) also expect to see a rise in Internet crime. This concern is not only directed at the violation of youth protection, human rights or personal rights – the fear of a loss of consumer protection, manipulation or vote rigging could become reality in future. That we will see individual national solutions to this problem is highly improbable and even the creation of European directives and laws would have very few prospects of success in a digital-networked world. This is a global challenge that can only be solved together.

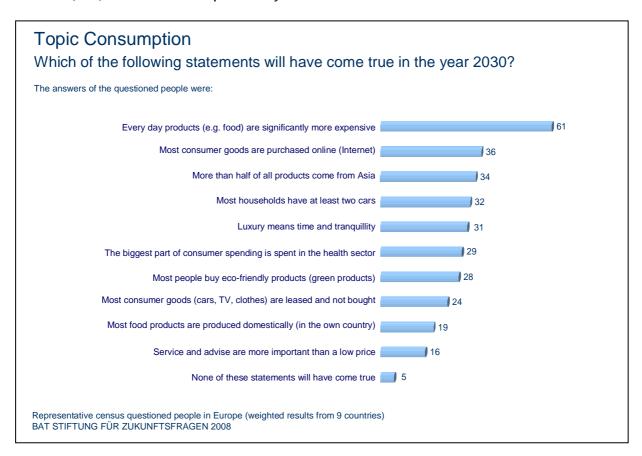
Every third European (30%) expects the crime rate among foreigners to be twice as high as among natives. Countermeasures could include tougher sentences for criminal acts (38%) and an improved exchange of data between the individual countries, which is seen as realistic by a quarter of Europeans. Both scenarios are above all considered likely by the French (49%) and the Swiss (49%), while the Italians (12%) conversely do not place much hope in such measures. Other concerns voiced by Europeans are the still unknown impacts of new bio- or nanotechnologies, which generate uncertainty in around one in four Europeans, and the fear of wars and conflicts over natural resources such as gas oil or water. Around half of the population see this scenario coming true for Europe. It therefore looks like guaranteeing the supply of energy and other resources could become one of the central challenges of the future.

#### Consumption: Everyday products cost more. Service orientation or leasing mentality?

Expensive oil and rising gas prices, a strong euro and a decline in consumer demand, a high cost of living and new taxes – consumers in Europe face an uncertain future and don't know for how long or whether they will be able to maintain their present standard of living. Nearly two thirds of Europeans anticipate higher prices for everyday items such as food. Above all the wealthy industrial nations like the UK, France, Finland or Switzerland expect prices to go up – with three out of four citizens in these countries showing agreement (73%, 77%, 75%, 77%). In Germany, this view is shared by as many as four out of five (80%), which cannot only be explained by the current downturn in the economy. No end to this development is in sight, especially since the economic cycle no longer follows a normal progression: in the past, first export business picked up, then companies invested more and employed additional staff. They, in turn, were able to spend more money, which again boosted retail trade. In the second half of 2008, this model no longer applies. Whether rising inflation or the smouldering financial market crisis are the reason is neither here nor there.

The fact is that a recession is spreading across Europe, which is leading citizens to develop a savings mentality. The supply of goods is guaranteed, but people are no longer affording themselves the luxury of spending. They are saving wherever they can: in everyday life and leisure time, when buying clothes or a car, when it comes to putting something by for old age or educating their children. For industry – which

drives consumption - this has meant a deep cut and an increased division of the supply. Most of the population will be on the lookout for inexpensive offers and savings in all areas. Only a significantly smaller proportion of the population will on the other hand still be able to afford a cost-intensive life in future. Thus only a third of respondents (32%) expect most households to own two cars and only a similar proportion believe luxury will be equated with time and tranquillity (31%). However, expectations within Europe vary strongly in this regard. Twice as many French as Germans, for example, anticipate at least two cars per household as well as leisure as the luxury of the future. The Italians, Russians and Spaniards adopt a sceptical stance towards our future consumption patterns, whereas the Finns, Swiss and Austrians hold a more optimistic view. Those who can afford to will buy eco-friendly green products. This is affirmed by more than a quarter of the population (28%). Among the French almost two thirds (59%) support this proposition, whereas only around one in eight of Austrians does so (13%). The Germans (19%) and Italians (16%) share the scepticism of their Alpine neighbours, while the majority of Finns (53%) can by all means imagine a trend towards eco-friendly consumption. The Finns rank first when it comes to service and advice: one in three Finns (32%) believes this will be more important than price in 2030 - conversely, only around one in twenty Italians (6%) entertains this possibility.



How and where will future consumers buy their products? How will they pay for them and which areas will experience a boom? Asia's pre-eminence in the consumer goods sector will continue to expand. One in three Europeans expects most products in future to come from Asia. Only the Russians are noncommittal on this point, probably because they are hoping for a boom for the former Soviet Republics or want to produce themselves. Online shopping will gain considerably less ground than is often assumed: only around one in three respondents (36%) thinks most products will be bought via the Internet in future. A significant rise in the proportion of online sales is obviously hampered by the above-mentioned fear of Internet crime. There will be few changes in consumer behaviour in future: online sales will continue to be effected in niche areas like books, music or ticket purchases. Respondents often don't see the advantage of the Internet in this area. They want to consume with all their senses, be assisted personally and often just look rather than buy.

Growing importance is given to the healthcare sector. Cuts in the costs borne by the state are already putting more onus on individual initiative. Almost every third European (29%) recognises the importance of this market and believes healthcare will play a key role in future. Just under half of the Swiss (46%) expect to pay more for healthcare in future, by contrast with the Brits (16%), who do not anticipate this trend. The majority of Swiss (51%) also believe leasing will be more important than ownership: those unable to afford to buy certain products will simply rent them. On average, one in four Europeans (24%) agrees with this statement, although it not only refers to the familiar leasing of cars, but also other consumer goods such as televisions or even clothes.

#### References

- Opaschowski, Horst W., Deutschland 2030, 2008
- PAN (Scientific Centre of the Polish Academy of Scienses Vienna, Austria), The Future of Europe, 2007
- GfK-Nürnberg Gesellschaft für Konsum-, Markt- Und Absatzforschung e.V., Challenges of Europe 2007
- Opaschowski, Horst W. Pries M., Reinardt, U., Freizeitwirtschaft, 2006
- Opaschowski, Horst W., Reinhardt U., Vision Europa, 2007

# AUSTRIA: A realistic picture of 2030 – and a touch of "Zukunftsangst" Reinhold Popp and Peter Zellmann

We understand futures research (along with Kreibich) to be the scientific work on possible, probable and desirable future developments ("Futures"), their realisation options, as well as their complex preconditions in the past and present.

By contrast with those trend gurus whose prophecies of spectacular events serve above all to enhance the entertainment value of Zeitgeist magazines, scientific futures research knows that the future is firmly rooted in our past and present. These deep roots can be found in our habits, in our understanding of human interaction, in the structures and functions of social and government institutions as well as in economic forms of organisation. Scientific futures research also knows that it is not possible to predict the future, because there is no such thing as the future! In fact, there are only "futures", in other words multiple scenarios illustrating how our society might develop in the future. Which of these scenarios become reality depends not so much on scientific insights, but rather on the creative capacity of social, economic and political interest groups. Future developments evolve in the continuous interplay between the conservative and innovative forces in a society. Innovation indubitably generates uncertainty, fear and resistance, so that new ideas as a rule only penetrate slowly into society. Despite the fact that many "futures" researchers – and certainly the media – understandably find the highly improbable and unexpected events (wild cards) or even apocalyptic images far more fascinating, it is usually the more humdrum scenarios based on circumspect reforms rather than on revolutionary quantum leaps in evolution that with hindsight prove to be realistic. It would appear that this circumspect view of the future is shared by the representative group of Austrians interviewed for this survey. Their responses present a tableau of social, cultural, economic and political life over two decades, which should be understood as the present status quo of a gradual reinforcement or contradiction of already existing trends and tendencies and, as such, does not differ fundamentally from life in Austria today. Probably the most important reinforcement of currently emerging trends is the almost pervasive influence of new media and the Internet on the two life spheres work and leisure, although at present futures research in the field of social sciences is unable to provide much concrete knowledge about the complex effects this has on the way people organise their lives or live together.

Summarising the results, the majority of future-related estimates and assumptions of those surveyed is approximately compatible with the scientifically-based views of the future of the two authors of the present paper.

In a few areas, however, those surveyed conceive rather more improbable future scenarios. This is especially the case for those topics that are particularly affected by fears for the future (such as the issues of *integration* and *security*) or that rest on very rigidly structured parameters and correspondingly conservative mindsets (such as the topic of *education*).

In general it can be noted that with only two exceptions on detailed questions, the range of Austrians' responses in all cases corresponds to the international average; they are therefore by all means justified in asserting that they represent the average European. Only the Spanish can claim to be similarly typical for Europe. The two Austrian exceptions are on the one hand the hope that the integration of immigrants will improve (only 17% assume that this will be the case compared to a spread in the

other countries of 18% in Italy to 49% in Switzerland). On the other hand, only 9% of respondents in Austria expect the gap between industrial and developing nations to narrow, which is fewer than elsewhere. Among the other countries, the spectrum for this question is a similarly pessimistic 13% in Italy to 16% in Germany. First let us take a look at some realistic views of 2030:

# The majority of Austrians have a realistic view of the future

# Example 1: Will more leisure time be more important to Austrians than a good salary in 2030?

Realistically, only a very small percentage (14%) of the Austrians surveyed thought it probable that leisure time would be more important than a good salary in 2030. They assume that in 2030 – much like today – the vast majority of employees will probably not have sufficient financial freedom to permit them to choose. Among the privileged minority of those in full-time employment who enjoy the protection of the social welfare system and earn good salaries, the number of people who – much like today – would prefer to forego part of their salary in favour of more quality of life outside their job will unquestionably be higher. For this target group, work in 2030 will be considerably more intensive and psychologically stressful than today.

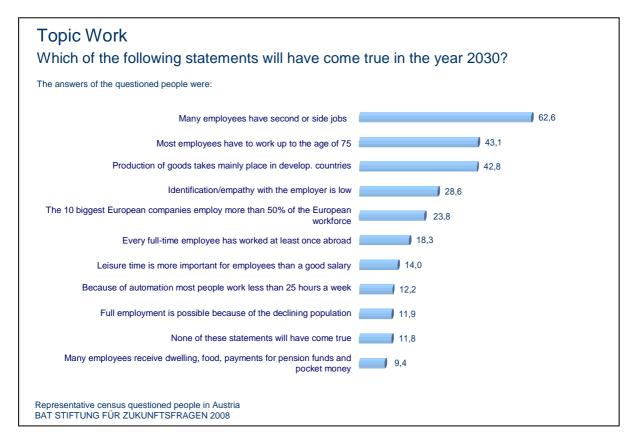
However, the responses are not 100% conclusive, since the question does not define what is meant by a "good salary". In order to eliminate possible misunderstandings, it should also be noted that the question does not compare "Leisure time and work/profession", but "Leisure time and (good) salary". If namely – as in various representative surveys conducted by the authors of the present paper – the question was/is directed at how Austrians rate the most important spheres of life, work and leisure time have for many years scored equally. This points to a stable tendency to balance the spheres of work and leisure time (work-life balance).

# Example 2: Will many Austrians receive an allowance and benefits in kind instead of a salary in 2030?

Quite rightly, only a small minority (9%) of the Austrians surveyed believe the not very appealing vision of a future in which many employees in 2030 could receive a flat, food, contributions to a pension scheme and an allowance instead of a salary to be a likely event. Indeed, given the traditional influence in Austria of collectively negotiated wage agreements, the prospect of being paid wages in the form of an allowance and "benefits in kind" is not a realistic one.

Outside the labour market, however, it is conceivable that by 2030, alongside the livelihood-securing and strongly flexibilised *primary-economic* sphere of working life – especially for the less privileged majority of the workforce – a type of work could increasingly develop that can be called *secondary-economic*. This sphere – in the grey zone between neighbourly help and moonlighting – would for example include performing various handyman or office functions on the basis of unpaid services in return or for a small consideration, as well as contributing to the self-organisation of establishments and initiatives in the field of social and cultural work, or performing simple nursing and domestic care tasks for relatives and friends.

Example 3: Will there be a shortening of working hours by 2030?



Realistically, only a very small percentage (12%) of the Austrians surveyed felt it likely that the majority of citizens will work less than 25 hours a week in 2030 as a result of the automation of the workplace. Indeed, no notable reduction in the currently valid core working hours (38-40 hours a week) for full-time employees is to be expected in the medium term. The reason for this is to be seen in the key importance of the services sector. Even today, around 70% of the Austrian workforce is employed in the broad spectrum of services professions. And this trend is set to continue! Especially positive prospects are accorded to the following seven types of services:

*Technical services* (i.e. various service occupations that only exist in connection with commercial or industrial production);

Banking and financial services;

Retailing;

Marketing, advertising and public relations;

Education & Knowledge management (diverse services that extend far beyond the school sector) as well as Research & Development;

Leisure and tourism industry

Already as many as approx. one fifth (in full-time equivalents) or in fact approx. one quarter (taking part-time employees into account) of the Austrian workforce works in this services segment. Trend: upwards;

Healthcare and social services

Although automation processes also influence the quantitative and qualitative development of service occupations (e.g. through electronically assisted self-service models), these lead to significantly fewer job losses than in the production sector. This of course particularly applies to *personal* services.

### Example 4: Will the gap between rich and poor be greater in 2030?

Two thirds (67%) of respondents firmly believe that between now and 2030 the gap between rich and poor will widen even further. Without overstretching the "gap" metaphor, this assessment is equally as realistic as the opinion shared by as many as 58% of the Austrians surveyed that poverty among the elderly will be an unsolved problem in 2030, as well as the view held by 56% of respondents that many Austrians will not be earning enough to put something by for their old age (over and above their state pension). Ultimately, the question of poverty is first of all a question of how it is defined.

According to European convention, we speak of "poverty" for households that earn less than 60% of the median income level of a given country. (This, incidentally, also means that if the median income level rises, so does the poverty threshold and, conversely, if the median income level falls, the poverty threshold falls too.) Public and published opinion frequently cites so-called *old-age* poverty as a special problem within the context of poverty problems in general. Strictly speaking, old-age poverty as such does not exist; what does exist however, is an alarmingly high poverty risk among older women. In the single-household segment (made up predominantly of elderly people) only around one fifth of the men, but as many as half (!) of the women are in the lowest quarter of the income bracket. Households with two older people have a significantly lower risk of slipping into poverty. Poverty among the elderly will therefore continue to be female in future, because women's lower incomes are carried over to their pensions. Since women will tend to be the winners in the future working environment, the proportion of elderly women who run the risk of poverty will decline slightly by 2030. Nevertheless, at least one third of elderly women will still be on the poverty line and therefore affected by old-age poverty. In light of the growing political importance of the voter potential of the elderly, which is set to increase dramatically up to 2030, it is very probable, however, that this problem will continue to be mitigated in 2030 through welfare benefits ("minimum benefits" in the sense of compensation adjustments).

The same political logic can also be applied by analogy to the level of retirement benefits and pensions in 2030. Consequently, the lowest third of the national income bracket, who did not earn enough during their active working life to enable them to pay into a private supplementary pension scheme, will benefit from the minimum benefits model. Only 21% of respondents accept the proposition that the Austrian state will guarantee all citizens, irrespective of age, gender, ethnic origin, etc., a minimum income in 2030 – significantly above the minimum benefits for those running a high risk of poverty. The "Minimex" (Opaschowski) model of a minimum basic income that is also controversially debated by Austria's major political parties as well as by unions and management is therefore currently not raising too many expectations. Its implementation will probably have to wait until well after 2030.

# Example 5: Will the majority of foreigners be living among themselves in segregated residential areas in 2030?

The concentration of the immigrant population in specific residential areas is viewed – also with a view to 2030 – as probable by nearly half (47%) of the Austrians surveyed. Known in official jargon as "segregation", this phenomenon may not be as strongly evident in Austria as it is, for example, in the major cities of France or

Germany, but nevertheless even here – especially in Vienna, the Alpine nation's only real major city – it plays a significant role. Segregation in Austria is only to a marginal extent politically motivated; it comes about for the most part because economically distressed migrants tend to settle in districts where living costs are lower. The future task for politicians should be to intensify suitable measures to prevent marginalisation or isolation of the population groups concerned. Where such measures have a long-term effect, a socially compatible segregation culture for migrants also presents an opportunity to develop independent ethnic structures and also reap an economic benefit from these (along the lines that Turkish bakers need Turkish customers).

## Example 6: Will healthcare costs be the biggest household budget item in 2030?

Only just over a quarter of the Austrians surveyed assume that healthcare will account for the biggest share of consumer spending in 2030. According to the most recently available consumer survey (2005), the average Austrian household spends 3.1% of its budget on healthcare. More differentiated statements can be made with the help of the "System of Health Accounts" (SHA) devised by the OECD. SHA is a system of comprehensive, consistent and internationally comparable health accounts that was also introduced in Austria with the recalculation of the 1997-2004 time series. According to the SHA, healthcare costs are made up of ongoing healthcare expenses and investments in the health sector. In 2004, Austrians spent approx. EUR 23 billion on health. Expenditure on health has increased on average by 3.3% per year, which is accounted for by a continuous rise in all individual components of public and private outgoings for healthcare. All social, economic and political trend analyses thus point to a gradual rise in both public and private spending on healthcare. If we extrapolate on the basis of past rates of growth, the statistical healthcare costs of a private household are likely to rise from 3.1% in 2005 to a maximum of 5.7 to 6% in 2030. The interviewed Austrians are therefore right to consider it unrealistic that the health sector will account for most of consumer spending in 2030.

# Example 7: Will the average number of children per household increase by 2030?

Only 19% of the Austrians surveyed cherish the illusion that women will have an average of two children in 2030. In 2001, 2.4 million children lived in 2.2 million Austrian families. This corresponds to an average number of 1.1 children. In 2006 the average number of children fell to 1.07. The medium-range prognosis of *Statistik Austria* assumes that by 2030, the average number of children in Austrian families will drop to 0.95. This is above all statistically linked to the fact that the number of households *without* children (above all due to social aging) will increase sharply from 833,000 in 2006 to 1.08 million in 2030. In general, the number of families without children will grow from 36.8% today to around 45% in 2030. In fact, according to this prognosis the average number of children in families *with* children will even increase slightly from 2006 (1.7 children) to 2030 (1.75 children).

### Other examples of Austrians' realistic views of the future

Only just under a quarter of respondents (24%) believe that in 2030 the top ten European Companies will employ over half of the European workforce. Given the prevailing corporate structure in Austria, this assessment is justified.

Apparently the majority of Austrians have very little faith in a sustainable labour market policy. Only 12% of those surveyed believe that by 2030 the decline in the population will make full employment possible. Nearly two thirds of respondents (63%) fear that in the medium term, many employees will have to take on second jobs or some other sideline in order to uphold their standard of living. Although these fears may appear exaggerated in light of the highly probable continued flexibilisation of the labour market, they should nevertheless give politicians and captains of industry considerable food for thought.

The interviewed Austrians see no evidence of anything akin to a *Global Marshall Plan* (Rademacher), in other words a globally effective development concept to fight poverty, something which, incidentally, Austria in particular so lastingly benefited from after the Second World War. As already mentioned in the introduction, only 9% assume that the divide between industrialised and developing countries will narrow significantly by 2030. Unfortunately, there is much to substantiate the accuracy of this assumption, provided that *developing* nations are not confused with *emerging* nations.

When it comes to emerging nations such as China, India or Malaysia, *Deutsche Bank Research* estimates forecast annual gross domestic product growth rates of at least 5%. (By way of comparison, the USA will probably only achieve GDP growth rates of 2.5% per year.)

40% of those surveyed realistically expect rich people to live considerably longer than poor people.

Private schools only have a certain tradition in Austria in the form of *confessional* (predominantly Roman Catholic) schools. Although these schools are privately run by church organisations, they are almost wholly funded by the state. Financing for non-confessional private schools in Austria is much harder to come by. Realistically, only just under a quarter (24%) of respondents is of the opinion that there will be more private than state schools in Austria in 2030.

The proposition that in 2030 talent scouts will be seeking out up-and-coming talent for the major companies even in primary schools is obviously considered fairly utopian by most of respondents. Only 20% see this – from an educational ethics perspective – dubious method of talent spotting as a realistic vision of the future.

Almost half of those surveyed (48%) agree with the statement that in 2030 more and more highly qualified women will occupy leading management positions. Given the high probability of this development, however, it might have been reasonable to expect an even higher correlation.

"Wars will be fought over natural resources such as oil, gas or drinking water." Unless efforts to set up a global energy policy are intensified, this belief shared by 46% of respondents is not unrealistic.

A rise in the incidence of multinationally organised crime is highly probable in all European countries. This view is also shared by 58% of the Austrians surveyed. This form of criminality should not, however, be confused with the less probable increase in criminality among foreigners living in Austria ("foreigner criminality"). (On this topic, see below.)

Internet crime will probably increase for the simple reason that the number of people surfing the World Wide Web is likely to rise significantly. This assumption is shared by 54% of respondents.

"Children will bear the financial responsibility for the pensions of their parents/grandparents". At any rate more than a quarter of respondents (27%) consider this fallback likely in times without social security. The majority of those surveyed continue to rely on coverage from pension funds, which in Austria are not in such dire straits as media reports are sometimes keen to suggest.

"Sex, hair colour and size of children can be selected in the case of artificial insemination." From the biotechnology perspective, this will in all likelihood be possible in 2030. However, only 22% of respondents believe – probably correctly – that 22 years from now all medical and ethical scruples in this regard will have been overcome and the legal bans lifted.

More than two thirds of the Austrians surveyed (68%) expect traditional marriage to continue to lose ground ("Most couples will live together without being married."). All available data and trends support this assumption.

Surprisingly few respondents (only 31%) believe that in future it will be easier to reconcile work and family (work-life balance). These data suggest there is an urgent need for action in the fields of occupational, economic and family policy!

Only 28% of the Austrians surveyed think it probable that in 2030 there will be more over 60-year-olds than under 30-year-olds sharing flats. All relevant data support the assumption that even in 2030, this form of living is only likely to be the arrangement of choice for a very small minority of older people. The majority of senior citizens still prefer to stay in their own familiar environment even when they grow older, where necessary supplemented by on-demand individual care.

"Concerning the interest-balance in an aging society, the votes of citizens under 50 count double." This development would be more than questionable constitutionally and is therefore only considered plausible by 8% of respondents.

Probably correctly, only very few respondents are confident that technical solutions alone can solve our climate problems: 11% expect that in 2030 "the problem of climate change could be solved thanks to technical developments", and only (8% believe that "weather stations will be able to generate rain, sun or snow in those places where they are needed."

"Most rubbish will be recycled." This expectation is indeed correct. However, given that this is already the case today for waste recycling in Austria, 44% agreement with this statement is actually surprisingly low.

Over a quarter of the Austrians surveyed (28%) believe that in 2030 most consumer goods will be purchased over the Internet.

However, the majority rightly consider it unrealistic that 22 years from now most of our shopping will be done via *eCommerce*.

Nevertheless, significant rates of increase can be expected here.

This is because in future not only our *consumption habits* or *cultural forms of expression*, but also living conditions in our homes and living environment will be more strongly influenced by a pervasive media presence than is the case today.

A central function in the broad spectrum of information- and entertainment-oriented service offerings will be accorded to so-called *New Media* – and in this context explicitly also to various forms of *eCommerce*.

The possibility this offers for using the Internet not only to retrieve all manner of information, but also to carry out various transactions (such as payments, placing

orders) without having to leave our own four walls, is likely to further reinforce the trend to "withdraw into the private sphere".

Whether identification and empathy with employers will really be lower in 2030 is difficult to assess from a scientific perspective. This will above all depend on how employers react in future to employees' requirements. However, the fact that only 29% of respondents believe a negative development likely should be encouraging for Austria's employers.

### Fears for the future and prejudices dissimulate the realistic view of 2030

There are only a few areas in which Austrians' visions of the future do *not* correlate with the findings of future-related research. This seems to be the case for issues that particularly mobilise fears for the future and/or question especially entrenched mindsets. Here, we also present some examples for these false assumptions:

### Example 1: Will most employees really have to work up to the age of 75 by 2030?

Surprisingly, as many as 43% of the Austrians surveyed thought it probable that in 2030 most employees will have to work up to the age of 75. The debate in Austria up to 2030 will not so much concern raising the statutory retirement age as increasing the age at which people *take* retirement. The statutory retirement age for Austrian men is currently 65, for women 60. However, the real age at which people give up work is known to be significantly below these thresholds. In Austria, a retirement age of 70 for women as well as men can be expected at the earliest by 2050.

The actual problem for the future – which public and published opinion does not devote sufficient attention to – is in fact less a question of retirement benefits and pensions than of extending the active working life of the workforce. The European Commission's policy guideline on growth and employment (2005) aims at achieving a Europe-wide employment rate of 50% in the peer group of 55- to 64-year-olds by 2010. Austria will fall far short of this target and probably only achieve an employment rate of 43 to 44%.

The need to extend individual working lives on the one hand is, however, confounded by the reluctance of many companies to employ older staff and the inability of a growing number of employees to cope with continuously increasing work-related stress (faster and more complex work routines, growing time pressure, new health risks as a consequence of changed living and working conditions, stress resulting from the reduced "useful life" of professional qualifications, etc.).

The challenge for society, business and politics is therefore to improve both the basic conditions and individual motivation to encourage older women and men to work longer. In the bigger picture, however, future-oriented generation management in companies needs to focus on all age groups and ultimately also beyond the horizon of working life on achieving a work-life balance, in other words reconciling the conflicting interests of work and leisure time.

## Example 2: Will the middle class really disappear by 2030?

Significantly more than half (56%) of the Austrians surveyed assume that by 2030 the so-called middle class will have disappeared completely. This opinion, which may

be motivated by some respondents' fear of a drop in social status, cannot be confirmed from the scientific perspective. The responses need to be relativised however, since the question does not define the term "middle class". If we (admittedly oversimplifying matters) define this concept purely economically in terms of a net household income of 1,500 to 3,000 euros a month, around half of all Austrians currently belong to a very broad-based middle class. The lower third of the income bracket has to make do with a net income of less than 1,500 euros a month and is therefore unable to afford many of the blessings of our consumer society. Households in the upper fifth of the Austrian population have a net income of over 3,000 euros a month at their disposal. In all likelihood, by 2030 the upper and lower extremes of the middle class will shift towards the upper and lower class respectively. However, in 2030 just under half of all Austrians will still have a coveted place in the middle class.

# Example 3: Will a third of all partnerships really be binational in 2030?

Only 30% of the Austrians surveyed assume that in 2030 one third of all partnerships in Europe will be binational. A glance at the relevant data, however, confirms that – at least in Austria – this level has already been reached. The number of binational marriages in Austria has risen steadily over the past ten years, although reliable figures are only available up to 2005:

1998 (13.9%), 1999 (15.1%), 2000 (16.3%), 2001 (20.9%), 2002 (23.8%), 2005 (25.7%).

This trend will in all probability continue to rise, although not at the same rate and with possible fluctuations. In 2005, 39,153 marriages were entered into, of which 10,075 were binational, corresponding to 25.7%.

# Example 4: Will crime rates among foreigners double?

As many as 43% of Austrians share the view that in 2030 the crime rate among foreigners will be double that of natives. From the scientific standpoint, this is highly unlikely. Immigrant criminality among the foreign population living in Austria is only marginally higher than that among Austrians. However, statistics relating to so-called foreigner criminality also include individuals residing in the country as tourists or illegal immigrants. The conclusion that foreigners living in Austria are more criminal than Austrians therefore cannot be empirically confirmed. Nearly all renowned criminologists share the conviction that in future, too, ethnic origin and religion will not be determinants for criminal behaviour, but that it will be social and economic factors that tip the scales. Relevant time series show that there are fluctuations in the area of foreigner criminality but no clear upward or downward trend. For the future, we can assume that the crime rate among Austria's foreign population will not rise significantly. Criminality among asylum seekers incidentally went down by 20% from 2006 to 2007, and in the first half of 2008 has continued to decline. However, even in the small state of Austria, the crime rate among resident foreigners has to be clearly distinguished from the impacts of internationally organised crime, which is expected to grow by 2030.

### Example 5: Will goods manufacture really be transferred out of Austria?

A remarkable 43% of Austrians think it is highly probable that most goods will be produced in developing countries in 2030. This opinion is clearly influenced by considerable fears of a decline in Austria's standing as a business location, however it does not reflect the real situation. Since 1990 namely, goods production at market prices in Austria has in fact at 161% shown stronger growth in real terms (i.e. adjusted for inflation) than the real gross domestic product (GDP) - i.e. the total volume of goods and services at market prices (149%). This shows first of all that the importance of goods production (from cold cuts to construction machinery) overall is not declining but remains at a high level. The relevant economic data indicate that both imports and exports of goods are likely to increase in volume as a result of the ongoing international distribution of labour: in the case of simple production processes (e.g. textiles, simple consumer durables) the volume of imports will rise, in the case of complex production processes (which are as a rule also more expensive) the volume of exports will grow. Fewer and fewer complex products (e.g. machinery) will be produced entirely in Austria; some will however contain Austrian parts or Austrian know-how. The proposition that in 2030 most goods will have to be imported from abroad is therefore (in this undifferentiated form) not a likely scenario. In light of their importance for the future of European society, we have dedicated more space in our article to the following examples:

# Example 6: Does Austria really need more day-care centres for senior citizens?

As many as 41% of the Austrians surveyed assume that due to the increase in the average age of our society, more and more day-care centres for older people (similar to the facilities available for children) will be opened by 2030. Obviously, we first need to clarify what individual respondents understand by this. From the scientific standpoint – at least in a comparable form to child day-care centres as a kind of supervision facility – this is not very probable. The respondents' images of the future in this area are obviously based on traditional stereotypes, which in 2030 will (hopefully) have been overcome. Beyond deficit-oriented concepts of old age, the phase of life after 50 (based on Opaschowski) is divided into three generations or age brackets:

The 50-plus generation or the "young agers", i.e. 50- to 64-year-olds. For them, the following applies: they are *still* needed in their job; last opportunity to switch to a holistic lifestyle.

The 65-plus generation or the "middle agers", i.e. 65- to 79-year-olds: those who have managed to adopt a holistic lifestyle are able to enjoy a previously unknown freedom in this age bracket.

The 80-plus generation or the "old agers", i.e. the over-80s: they have already exceeded the statistical time budget and can enjoy each additional year they have left. This group of the population is dominated by women.

Apart from the common criterion of aging or growing older, these three generations of senior citizens have very different fields of interest and activity. The social and healthcare policy problems related to aging, which are generally subsumed under the expression "in need of long-term care", are incidentally more closely associated with the group of "older agers".

However, public and published opinion often equates this problem with the entire phase of post-employment without further differentiation.

It is certainly correct that in 2030 there will be a greater need for long-term care in the over-80s age bracket compared to the present-day situation.

Reflecting this, the demand for centres providing day care for the very old and those in need of care, as well as advice and support for family-member carers will grow. This type of social infrastructure cannot of course be compared to child day-care centres.

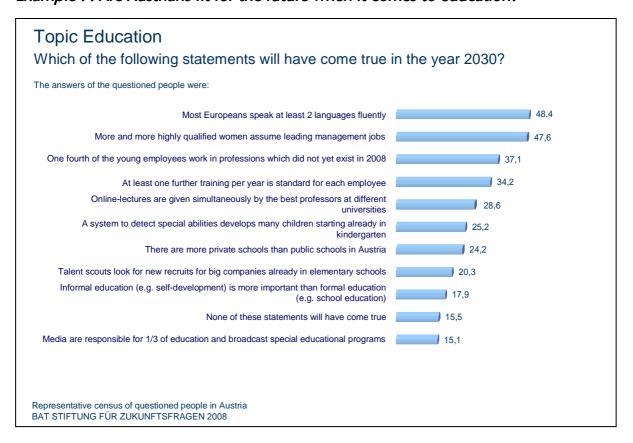
As regards the two younger senior-citizen generations of 50- to 65-year-olds and 66-to 80-year-olds, the need for *age*-specifically organised "supervision facilities" is from a *quantitative* point of view not likely to increase to any significant degree.

From a *qualitative* perspective, however, there will be a considerable need for innovation: the trend in this area is towards an intergenerational and multifunctional approach. In the past, social and socio-cultural infrastructure was quite simply separated according to *target groups* (e.g. children, youth, senior citizens) and *functions* (e.g. welfare, culture, education, sport), often also depending on the responsibilities of the respective offices, departments and authorities.

In future, the *intergenerational* aspect will (have to) be given greater consideration in the planning and design of socio-cultural infrastructure, i.e. the promotion of more intensive communication and cooperation between the generations.

This is probably more likely to succeed on the basis of *multifunctional* infrastructure concepts that also integrate our school buildings – which stand empty for far too many hours a year and are also planned much too monofunctionally. In the meantime in Austria we are now also paying for the deficits of the 80s and 90s (and in this connection also the lack of attention given to pilot projects in this field, e.g. TSA-Vienna) through the meaningful realisation of all-day forms of school education.

Example 7: Are Austrians fit for the future when it comes to education?



Only 18% of respondents espouse the idea that in 2030 informal education will be more important than formal education. Apparently, a large majority of the Austrians surveyed do not believe in an education system that – with a view to the challenges of lifelong learning – builds increasingly on *informal* or self-organised learning processes. The majority of respondents expect the predominance of academically organised formal education to continue in 2030. Many Austrians obviously cannot imagine learning without a teacher. One finding from time budget research, however, reveals that even the privileged minority, who after their basic education attend higher schools and even university, only dedicate 3 to 4% maximum of their lifetime to *academically* organised learning processes.

Although a majority of Austrian voters do not expect this to be the case, an educational policy and educational planning geared towards lifelong learning should in future more intensively reflect the broad spectrum of *non-academic* fields of learning, e.g. the educational role of the media as well as the increasingly individualised and modularised educational offerings on the World Wide Web.

This challenge, too, is not sufficiently recognised or accepted by the Austrians surveyed. Only 15% of respondents assume that the media will be responsible for one third of the education offering in 2030 and broadcast special educational programmes to meet this.

Only 29% can imagine that in two decades online lectures will be delivered simultaneously by the best professors from a variety of universities.

In all probability, by 2030 at the latest the first halfway functioning interpreting programmes will be available. With their help, it will be possible to directly translate simple spoken texts into the major languages. This will not only dramatically change conventional language teaching, but also global communications.

Here again, only 30% of Austrians consider this media-based innovation realistic.

We should not forget, however, that the *lower third of the income and educational* bracket – already underprivileged in many respects – will also prove to be severely disadvantaged when it comes to the utilisation of new media. Moreover, we should not underestimate the problem of social inequality relating to the use of communication technologies in the comparison between *young* and *old*.

The elements of the Austrian school system are on the whole not very interchangeable and tend to stabilise the standard of education of pupils' backgrounds. Consistent with the finding that the interviewed Austrians do not consider a fundamental reform of the education system possible during the next two decades, only 13% of respondents expect children from the poorer echelons of society to have the same educational opportunities as those from an academic background. Social mobility – to be achieved by improving the qualification possibilities for population groups that have only had limited access to education in the past – is, however, seen as one of the key prerequisites for ensuring Austria's international competitiveness.

One important measure towards achieving this goal would incidentally be the areawide introduction at pre-school age of appropriate educational programmes from a developmental psychology perspective.

Although compulsory schooling in Austria will most probably already be brought forward – initially in the form of a compulsory kindergarten year – in the next few years and in 2030 will long be reality, only 25% of respondents expect that in 2030 kindergartens nationwide will have the task to detect special talents and abilities in children and develop pedagogical programmes to promote them.

In light of the inevitable reform of Austria's education system in the future, educational science, the media and above all educational policy still have a long way to go!

Austrians are surprisingly optimistic with respect to assessing language skills. Almost half of respondents (48%) assume that by 2030 most Europeans will speak at least 2 languages fluently (!). However, in view of the demographic structures in all EU countries and the specific situation in the new EU member states, this status cannot be expected to be reached before 2050.

In conclusion, let us take a brief look at those fears Austrians have for the future ("2030") which, in addition to those topics discussed here, are quantitatively of consequence, but which we do not have room to discuss:

Inflation: "Everyday products (e.g. food) are much more expensive" (64%).

Water. "Clean drinking water is a luxury in Europe" (49%).

Coexistence of different cultures: "Cultural diversity leads to conflicts between groups (e.g. Africans, Muslims, Turks)" (48%).

#### Finland: HOW THE FINNS VIEW THE WAY OF THE WORLD IN 2030

Sirkka Heinonen and Markku Wilenius

In this essay, the Finnish views of the country and of the world in the year 2030 are highlighted and commented on based on the results from the pan-European study that questioned 1,000 Finns.

#### Finland leaning towards the future

Finland is a very future-oriented nation. We are continuously trying to monitor and especially anticipate development trends and discontinuities in the changing environment. This futures approach is distinct both in the public sector, academia, companies, and civic organisations. A systematic launching of efforts to foresee societal development, emerging issues, risks and opportunities took place in the late 1970s and early 1980s. Accordingly, there is already a futures tradition of thirty decades in Finland. Naturally, the scale, intensity and nature of futures activities and interest have been diversified to a large degree in this timeframe. For Finland, the kind of futures approach practiced may partly be explained by the will to survive. For historical and geopolitical reasons, Finland has, throughout the centuries, been obliged to develop a survival capacity and intelligence for overcoming obstacles, as well as to build up a foresight competence. This has been important in order to be able to diplomatically cope with the surrounding world as well as to promote the country's own socio-economic and technological progress.

The Finnish Society for Futures Studies was founded in 1980. It aims to influence the long-term development of society by advancing futures research and its utilisation through fostering contacts among futurists in public and private sectors as well as in NGOs. The Finland Futures Research Centre was founded in 1992 at Turku School of Economics. It is an academic unit for futures research, education and development, which operates on the local, national and international level. The Centre produces and promotes visionary information on the future trends of society and the environment. The Committee for the Future with the Parliament of Finland was appointed in 1993 and is unique in the world. The Committee has 17 members who are all members of Parliament and represent different political parties. The Government submits Futures Reports on Finland's long-term development options to Parliament, while the Committee prepares responses to the policies outlined in those reports (PMOF 2007). In 1996, the responsibilities of the Committee of the Future were extended to include technology assessment activities. The Committee for the Future was granted permanent status in 2000. The Finland Futures Academy was founded in 1998. It is a national network of 17 universities created with the aim of supporting multidisciplinary academic, educational and research programmes in futures studies. The Prime Minister's Office has also recently established a foresight network where all ministries are represented with the aim of integrating a foresight approach into their activities. In 2006, the Finnish Innovation Fund (Sitra) launched another national foresight network, which works through multi-stakeholder work groups to identify future challenges and opportunities available to Finnish society. Sitra lends an attentive ear to a large audience, including citizens and civic organisations, concerning views of the future. Finland's future has a democratic face, in the sense that many stakeholders, from the government and company levels

thorough to the individual citizen level, share the interest in monitoring the future as well as in sharing and debating the expressed future views.

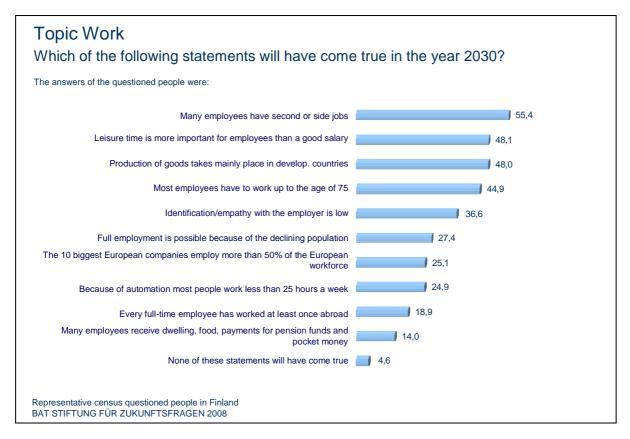
It is interesting to note that in the course of the last 15 years or so, along with the above-named developments, Finland has gained a solid reputation as a country with an excellent education system and a highly competent high-tech economy, as well as a country that seriously strives for sustainability. As most of the major trends affecting the next twenty years point to increasing resource scarcity on the one hand and the growing importance to assume human capital as a central source of wealth accumulation on the other, we may expect those countries that devote considerable effort to acting upon these challenges to be on the top of the curve by the target year 2030.

### New meanings of work

When analysing the responses of the Finns to the statements concerning the topic of work, it is interesting to note two major developments. On the one hand, work will have new meanings by 2030. It will no longer be a monolithic and safe provider of subsistence, if it ever has been so. Instead of working for one employer, many people will have a second or side job to fill their working portfolio. More than half of the respondents agreed to this statement, showing no deviation among male or female respondents. Identification or empathy with the employer was also considered low by almost half of the respondents. This is a clear shift in the paradigm of work from loyalty and commitment to the employer as a relic from the Lutheran work ethic towards a more individual-oriented mental model where the employee will emerge as a pivotal actor concerning his or her work contribution and choices. This kind of employee empowerment is in line with regarding leisure time as more important than a good salary, as almost 50% of the respondents suggested. Work is becoming more meaningful to employees; values and, for example, environmental performance must be more and more in agreement with those of the employees.

The other noteworthy development is to be seen in the pessimism towards a claim that most people will work less than 25 hours per week due to automation. Less than a quarter had some faith in automation as a means of relieving the number of hours worked. Expectations of such a reduction were highest in the 15–19 year-old age category. However, there seems to be quite a lot of support for the view that the retirement age will increase further. Some 45% of the respondents think that most employees will have to work up to the age of 75.

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Overall, the respondents seem to be fairly confident that the changes in working life will be fundamental. They expect that a lot more small companies will take the lead in providing jobs and there seems to be a strong belief that talent management will be a key function of the organisations by then. Moreover, half of the respondents thought that, by 2030, most of the manufacturing jobs would be in developing countries, showing a firm belief in a further globalisation trend in European societies. The interesting issue to reflect on here is what is left for Europeans to work on, as not only the production of goods but also services are increasingly relocated outside the North and West.

# The poor and the rich drifting apart

Many Finns foresee that the gap between poor and rich will have become wider in Finland. 70% of the respondents felt this and at the same time they worried about the income level being insufficient to allow them to save for retirement. Even though almost a third of the respondents foresee that the government will guarantee a minimum income for all, independent of age, gender, origin, etc., almost every other respondent felt poverty in old age will be an unsolved problem. In this regard, there did seem to be a correlation between education level and trust in the public system: the more educated people are, the more they seem to believe that the Finnish government will be able to overcome these challenges. However, it was estimated that the income level of top managers, would not have declined much by 2030. A strong claim that the middle class has almost disappeared gets support from less than a quarter of the respondents. This may be partly due to the fact that Finland has never really been a class society. Owing to democracy, equal basic education and the health care system, the whole of the Finnish population might well be characterised as one big middle class. This was also reflected in the rather strong disagreement

with the statement that the amount of children would be a question of affordability. It was, however, somewhat surprisingly, that as much as nearly a quarter of the respondents think that the gap between industrialised nations and developing countries will have become smaller. This may be based on the increasing dissemination of digitalisation into developing countries, inadvertently providing better livelihood opportunities.

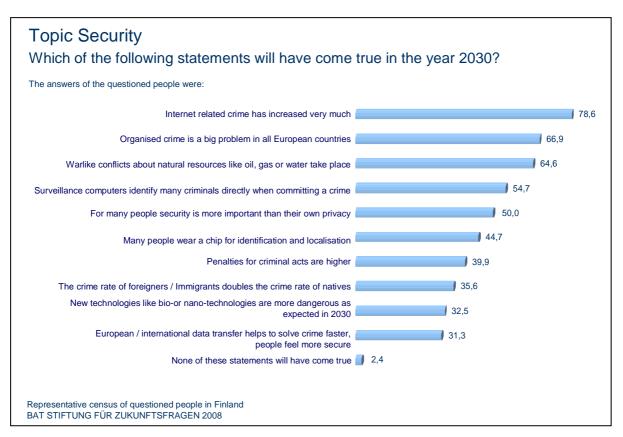
### Knowledge is still power

The highest consensus concerning the statements on the topic of Education in 2030 was achieved on the statement that more and more highly qualified women will assume leading management jobs. More than half the respondents agree that most Europeans will speak at least two languages fluently and that online lectures will be given simultaneously by the best professors at different universities. The strength of the Finnish public school system may be reflected in the fact that only a fifth of the respondents foresaw that there will be more private schools than public ones in Finland in 2030. The demand for lifelong learning and education is invading the workplace, where at least one further training per year will become standard for each employee according to more than 40% of the respondents. The Finns are also willing to see totally new occupations emerging, since nearly half of them think that one quarter of young employees will work in professions which did not yet exist in 2008. Almost a third believes that informal education (e.g. self-development) will be more important than formal education (e.g. school education). This is in line with the views on the topic of work as presented above. Formal commitment to the employer will not be considered as important as the contents and meaning of the work itself directly to the employee. Almost a quarter of the Finnish respondents see media as an emerging actor in education, where the media is responsible for one third of education and broadcasts special educational programmes. Thus not only will the forms and nature of education be changing, but also the platforms and providers of education will be more diversified than today. Schools and universities have a vital role to play in forming a tolerant and civilised society. As Martin (2006) points out, there could be a deliberate emphasis on education for quality of life and education about other cultures to help spread understanding among civilizations civilisations. In general, the results show that there seems to be a greater belief in the virtues of new educational activities among women than among men. This is perhaps not that surprising, taking into account the fact that women are also much more confident than men of their increasing role in working life. As women get more power, more changes are going happen in the ways education is pursued in post-industrial societies.

### Balancing out security and privacy

As an advanced information society, Finland is also aware of the downside of the coin. Almost 80% of the respondents fear that Internet-related crime will have increased very much, and almost 70% estimate that organised crime will be a big problem in all European countries. The Finns see surveillance computers as useful in identifying criminals while committing a crime. This is understandable, as there have already been several cases in reality where such technology has played a decisive role in solving criminal cases. The respondents are also comfortable with the view that many

people will wear a chip for identification and localisation. Exactly half of the respondents state that many people consider security to be more important than their own privacy. Only a third sees new technologies like bio- or nano-technologies becoming more dangerous in 2030 than expected in 2008. According to the FinnSight 2015 project, global risk management will assume ever greater importance in the future. In particular, better control and anticipation is needed in order to contain risks related to the economy, environment, energy, infrastructure and health. Steps are needed to strengthen the application of global knowledge and cultural know-how in research and innovation activities. Glenn et al. (2008) also emphasise that the risks from acceleration and globalisation of science and technology are enormous, giving rise to emerging ethical issues. They propose a global collective intelligence system to track science and technology advances, forecast consequences and document a range of views for the politicians and the public to understand the potential consequences of new technologies.



Results proved that respondents in general (almost two thirds of respondents), and particularly those with children, saw the conflicts related to natural resources as rather threatening. This is probably reason to believe that the major thrust of the international efforts in the future will be towards conflict resolution.

### Family on demand

The traditional family model will have transformed into something more flexible and open as regards the gender issue of a couple. Some 67% of the respondents claim that besides x-y models, there will be x-x or y-y models, in other words same-gender couples will be allowed to get married and adopt children. Probably owing to the accustomed Internet-enriched daily life of Finns, some 40% of the respondents are

assured that every third partnership may be the result of Internet-dating-networks. The idea of designer babies is not too far-fetched or ethically rejected, since almost a third of the respondents think that sex, hair colour and size of children can be selected in case of artificial insemination. This statement does not, however, delve further into the issues of gene manipulation. The views on the aging population are favourable for innovating new modes of action, such as opening day-care centres for senior citizens similar to day-care facilities for children. In fact, the so-called sandwich generation, which has to take care at the same time of their young children and aging parents, is willing to visualise new ways of coping with the combined challenges of work and family life. Perhaps there will be facilities for both children and their grandparents to be jointly taken care of within larger office complexes. This issue may even become a criterion for company social responsibility and be incorporated in such agendas. As stated in the views on the topic of work, commitment to or identification with the employer is not as high, unless there are common values involved. Half of the respondents consider compatibility of work and family to be possible for women. An interesting observation can be made in that respondents from a family with two children considered this to be slightly less possible than those from a family with only one child or with three or more children. Moreover, single adults showed far less confidence in the compatibility of work and family than married ones. Clearly, these two issues - aging population and the challenges of maintaining a work-life balance – are viewed as also being problematic in financial terms and in terms of wellbeing in 2030, even though the forms, nature, and organising of work may have changed dramatically by then.

The future of the family is an interesting question. On the one hand, there seems to be a trend away from the nuclear family as we know it while, on the other hand, people are still very much willing to be a part of the community in spite of individualisation tendencies. The demographic change in Western societies in the next twenty years will bring about new efforts to attack the true disease of our time, which is not going to dissipate, i.e. the feeling of loneliness. In the positive scenario, the value of being a part of the community will then be acknowledged more, with the result that new forms of longevity services will be launched together with grass-root activities for people who create new lifestyles to fulfil their demands for a good life.

### Can you see the blue sky?

Climate change is the number one challenge for our era. It has been said that climate change represents a greater danger to our future than terrorism (Martin 2006). There are plenty of things we can do to avoid catastrophic change if we do them soon. We would need a global strategy to address climate change. In the information age, this demand is ever more pressing since the majority of 50 million tons of e-waste produced annually is dumped in developing countries (Glenn et al. 2008). However, at the moment we are not doing enough. For example, taxes on international travel, carbon, and urban congestion could be introduced. The results of the questionnaire show a reasonably high environmental awareness and to some extent even optimism. The highest consensus on any of the statements in any of the topics among the Finnish respondents was achieved with regard to the claim that most trash will be recycled in 2030. The high price and availability of energy and clean drinking water are embedded in this global issue. Over half of the respondents consider that clean

drinking water will be a luxury item in Europe. There is no ungrounded technological optimism, since less than 15% of the respondents believe that the problem of climate change will have been solved due to technical developments. Neither do they expect genetically modified food to relieve hunger. Nearly half of the respondents think that a large part of the population in developing countries will have to starve because more plants are grown for regenerative energy than for food supply. The world has been consuming more food than it produces for five years now. Rising prices for basic food are beginning to lead to political instability and riots in many countries. Thus, land used for producing fuels instead of food in this perspective is bound to raise a serious ethical issue globally. The production of energy has to be shifted towards renewable sources. Some 43% of the respondents feel that solar and wind energy will account for more than half the energy production. It is noteworthy, however, that some countries are better suited to these alternative forms of energy than others. Finland has a huge challenge in introducing and adopting more solar energy utilities, due to harsh climatic conditions with scarce sun exposure. Only a third of the respondents expect pollution of the environment to be the number 1 cause of death. This may be due to the fact that pollution levels in the atmosphere are not very high compared to some other industrialised countries. These results are in line with the FinnSight 2015 project, which emphasised that energy and environment issues are of critical importance globally, and therefore investment is needed in the development and use of new forms of energy generation, in the sustainable management of the environment and in environmental technology innovations.

There seemed to be a general disbelief in the ability of the global governance system to readjust itself. If over half of the respondents think that drinking water will not be easily accessible in twenty years time here in Europe, this shows, together with the results that indicate that people assume Southern countries will have to suffer hunger because of our energy demand, that people have a rather pessimistic view of the future. Here, the younger age cohorts seem to be a little less pessimistic than the older ones.

### Consumption goes green and digital

Everyday products are estimated to be significantly more expensive in 2030. The green markets are seen to evolve rapidly, since more than half of the Finnish respondents think that most people will buy eco-friendly products. These green products represent two major trends: environmental awareness and increasing interest in health and fitness issues among consumers. On the other hand, only some 27% of the respondents agree that the biggest part of consumer spending will be on the health sector. Almost one in two thinks that consumer transactions will be mostly done online. As a result, there will be a lot of transportation, since more than half of all products are viewed to come from Asia. Digitalisation may facilitate transactions and trade, but in many cases it may generate even longer distance transport, with resulting environmental impacts through GHG emissions. Car dependency also persists - some 43% believe that households will have at least two cars. In Finland, we could add that households have two homes as well, which also generates physical traffic. Consumption is a culture itself, but it may approach culture in a broader sense. Overconsumption may exceed a critical limit, after which quality is the motivation for consumption - not quantity. Thus, luxury means time and tranquility according to

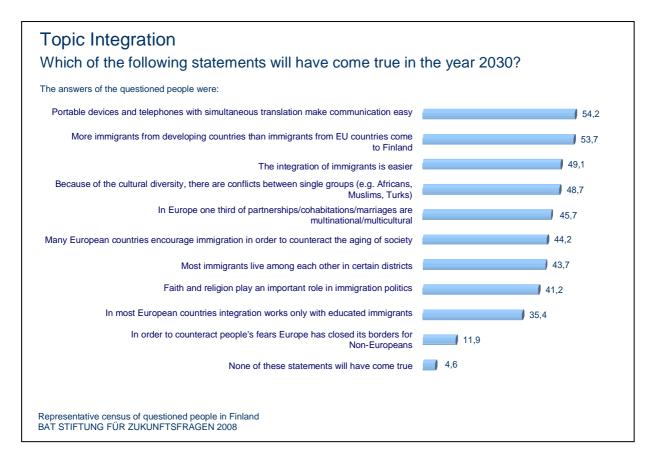
some 37% of the respondents. The so-called slow life movement – from slow food, slow design, slow housing, slow cities, slow sport through to slow travel – added to the trends of downshifting and eco-sufficiency may revolutionise the consumer culture. This is related to the concept of cultural competence, which according to the FinnSight 2015 is a major strength of the economy, society and development. It is therefore important to strengthen the position of cultural competence. Consumption culture can be seen as part of such cultural competence. According to Martin (2006), intense consumerism, which could have brought high quality of life, tends to create a tense, overworked, media-saturated society. However, this is not the fault of technology, since the same media and digital technology could well be the enabler of a highly-advanced civilisation.

Overall, respondents expect the existing trends to continue into the future with no radical changes. On the one hand, we see the result of immense wealth creation as being distilled into ever more substantial consumer spending. On the other hand, there are growing numbers of people that are disillusioned about the rewards of a consumption-orientated lifestyle. The true weak signal in these results might be surprising: if only 20% of people think that most food is produced domestically, there is no real aspiration for these respondents to assume that resource scarcity, climate change and other socially threatening issues are really changing our fundamental consumption and production patterns.

### Integrate or perish

Information and knowledge societies are based on fluent communication. Portable devices and telephones with simultaneous translation will have made communication easy by 2030, according to a good half of the Finnish respondents. The coming of automatic simultaneous translation technology has been a standard expectation worldwide ever since the early 1970s. Especially in Japan, a lot of resources have been allocated to these efforts. However, even though such translation technology has finally been developed to a certain degree, this view seems still somewhat overoptimistic.

One respondent in two is of the view that more immigrants from developing countries than from EU countries will have come to Finland by 2030. This is bound to create some problems and tough challenges for smooth integration due to cultural differences, even though almost half of the respondents think that the integration of immigrants will have become easier. This view is very optimistic and ignores the possibility of tightening the flow of immigrants from outside the EU borders. Already in the 2010s, the global economic situation, political milieu and security landscape are likely to have changed radically due to the acerbating climate change and higher price of energy and food so that the immigration issues will have quite a different nature than in this decade. It is already foreseeable that in many countries, in particular in Africa and Asia, the drought, declining water tables, malnutrition and the long-term reduction in global food production will be a catalyst for political crises and even armed conflicts. As a result, as many as hundreds of millions of people will seek a better life in Europe. The interview results achieved seem to reflect more the present situation than a future perspective. In this sense, they do not convey a probable picture based on real pressures in the global perspective.



At the same time, the respondents admit that because of cultural diversity, there are conflicts between single groups, e.g. Africans and Muslims. Integration is slow because most immigrants live among each other in certain districts according to some 44% of the respondents. This is a highly probable future development, since in all developed countries there has been a strong tendency for immigrants to settle in the same housing areas as their compatriots. This has resulted in continuous segregation. Almost 46% of the respondents estimate that one third of cohabitations and marriages will be multinational or multicultural in Europe in 2030. This number of multicultural marriages is high compared to figures from many countries over a long period of time. Analogous to the segregation tendency as regards housing areas, the trend of immigrants to enter into marriages with people of the same cultural or national origin is very strong. In Finland, the knowledge of the Finnish language is a critical factor for alleviating immigrants' alienation and segregation, as well as for enabling their better integration into society. More than 44% of the respondents welcome immigrants, since they are seen as a vehicle for counteracting the aging population in Finland. The transformation of Finland into a truly multicultural nation will, however, be a formidable challenge.

### Conclusion

Systematic futures thinking is an age-old human activity. We as humans have always been interested in our future. In today's fast-changing and "flattening" world, anticipating tomorrow gives strategic benefits to nations and a competitive edge to companies and organisations. Futures research means a proactive approach for identifying and interpreting a full range of signs for change: starting from megatrends, to trends, discontinuities, wild cards and weak signals. Futures research

is utilising the experiences and data from history added to the knowledge of the present situation in the economy, society, culture, technology, etc. On this basis, the goal of futures studies is to foresee where the world is going, where we are heading for - to envision alternative development paths. Both historians and futurists tell us of the same time continuum emerging from the dimness of the past and continuing into the future. History and the future have a common meeting point in the present - the future, however, should not be seen as a linear extrapolation of the past moving forward through the present. The relevance of futures research is to show and open up the vast variety of possible futures in our world of great uncertainties. It is all about the futures-building capacity which can also be characterised as futures intelligence, utilising specific futures methods. In this kind of systematic foresight process, it is of utmost importance and of great interest to monitor - not only foresight practitioners' - but also citizens' views of the future. This should provide a basis for on-going futures dialogue between public authorities, academia, companies, civic associations and ordinary citizens. All these together would form a collective base, in constant dialogue, for foresight intelligence. Views and opinions concerning various statements about the future are like signals telling us about the prevailing hopes and fears concerning future development. This gives us guidelines and encouragement to continue efforts for creating better futures.

As the results show, Finns see the upcoming changes mostly as a continuation of the past development. The disintegration of working life continues together with the rich getting richer and with increasing numbers of people having difficulties coping with life as they grow old. At the same time, Finns, as true believers in education, see learning as a crucial element in the job markets and increasingly view all kinds of education, beyond the classroom, as beneficial for individuals. To wrap up: when more than half of the respondents believe that Finland will be globalised beyond Europe, as the majority of immigrants will come from other parts of the world, we shall, in this scenario, live in a very different Finland in 2030 compared to now. Thus the evolutionary development assumed by the majority may ultimately lead to a revolution.

### Refernces

FinnSight 2015. The Outlook for Science, Technology and Society. Helsinki 2006, 68 p.

Glenn, Jerome, Gordon, Ted and Florescu, Elizabeth (2008). *State of the Future 2008*. Washington, 104 p. plus CD-ROM.

Martin, James (2006). *The Meaning of the 21st Century. A Vital Blueprint for Ensuring Our Future.* London, 526 p.

PMOF = Prime Minister's Office Report (2007). *Improving the Government Foresight Reporting Procedure. Summary.* Prime Minister's Office: Publications 1/2007, Helsinki, 41 p.

# France: France 2030: from disappointment to a new confidence in the future Fabienne Goux-Baudiment

### Introduction

On the occasion of the 3rd European Futurists' Conference, the Scientific Committee running the event decided to produce a book on the vision Europeans have of their respective countries in 2030. The survey was conducted by BAT STIFTUNG FÜR ZUKUNFTSFRAGEN. What do the results of this survey teach us? Firstly, the results teach us that it is extremely difficult to imagine oneself in the future. Most interviewees answered the questions by simply extrapolating from what they were experiencing or feeling on that day. Few of them thought their responses out objectively, i.e. on the basis of a given future world situation, as futurists can foresee it in the light of the main trends. This difficulty in thinking how the future might be is a problem whose roots lie deep in the arcane mysteries of human history. The future arouses unconscious fears: fear of losing one's family (especially when grown-up children leave the parental home), fear of losing one's social position (unemployment, professional responsibilities, etc.), fear of the unpleasant surprises that life may have in store and so on. This is why thinking about the future is both a matter of personal attitudes – spontaneous confidence in life, innate optimism – and of learning: one can learn to imagine oneself in the future using various methods, some of them as popular as reading works of science fiction or alternative history (Uchronia) and some more sophisticated, such as drawing up future scenarios or planning. In addition, generally speaking, imagining the future is often connected with a person's culture – some cultures are more backward-looking and others more forward-looking – rather than necessarily with age, as people tend to think. Some young people can have more difficulty in seeing themselves in the future, which leaves them rather indifferent, than very elderly people, who are more curious. Finally, the image of the future within a single country can fluctuate over time: the 1960s and 70s, for instance, generated a more forward-looking mindset in France than the 1980s and 90s, when a gloomy outlook prevailed. Secondly, the results obtained give us information not about the future but about the present. They tell us about the state of mind of a given population, at a given time, with regard to a future situation seen from a pessimistic or optimistic viewpoint. It is interesting to compare this state of mind in different countries, thereby revealing different perceptions or cultural attitudes, but also over different time periods in the same country. Much can be gleaned, for example, from the European Values Survey conducted regularly since 1980<sup>10</sup>, which tracks changes in people's values and social attitudes, and from comparing the results of the survey conducted by the CSA in 2000 on the French and the future (cf. annexe 1) with the results of the survey on which this work is based. Furthermore, these results give us information about the level of real knowledge of any given population: false assertions that conflict with statistical or qualitative (survey) data usually reveal irrational attitudes (i.e. with no

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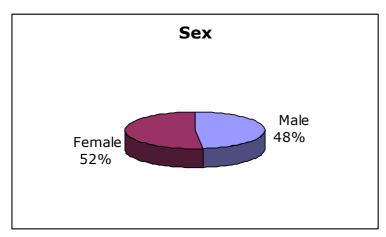
actual relationship to existing data), whether they derive from incorrect (collective or individual) preconceived ideas or simply from individual pessimism or optimism. The

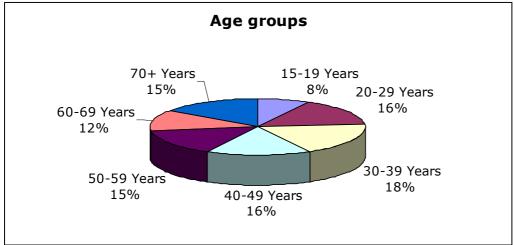
<sup>&</sup>lt;sup>10</sup> cf. Hélène Riffault, Association pour la Recherche sur les Systèmes de Valeurs (ARVAL), EVS (European Values Survey), 1981 and 1990; and Riffault Hélène, Les Valeurs des Français. Evolution de 1980 à 2000. Paris, 1999.

volume of true assertions, on the contrary, gives information not only about the country's level of education but also the quality of the information provided by the media which are currently the principal vector.

In this chapter, we shall therefore try not only to analyse the results obtained, but also to understand why they are as they are. Although they are very detailed, both in terms of age group, sex, household size and size of community, regions of France, professional and marital status, etc., we shall not go into these distinctions. In fact, we have opted to look at the big picture in line with futurist thought, constructing a composite image of a population as a whole, as represented proportionally by the graphs below (figure 1)<sup>11</sup>. To do this, of the eight fields chosen to describe France in 2030, we have extracted the three we considered most appropriate to describe the socio-economic context in 2030: work; the relationship between rich and poor; and education. Why did we make this choice? Because it allows for a systemic approach, placing education at the centre of socio-economic development factors: the level of education is the gateway to occupational income that determines present and future living standards and ability to cope with the need for family solidarity that is often inter-generational.

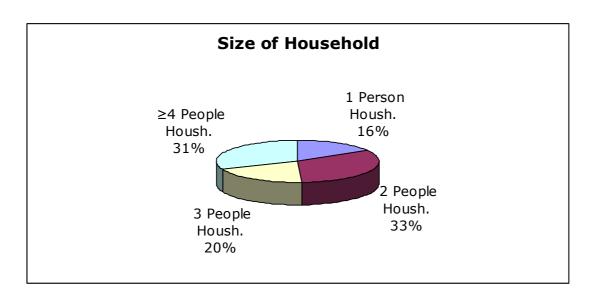
Figure 1: Composition of the representative sample of the French population in May 2008

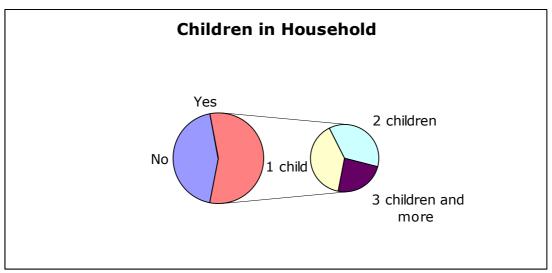


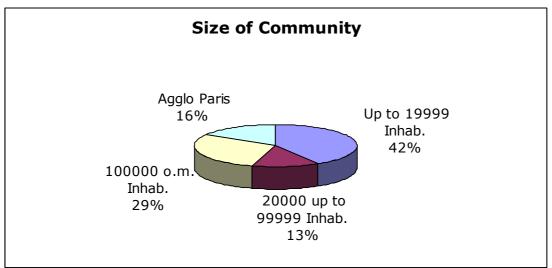


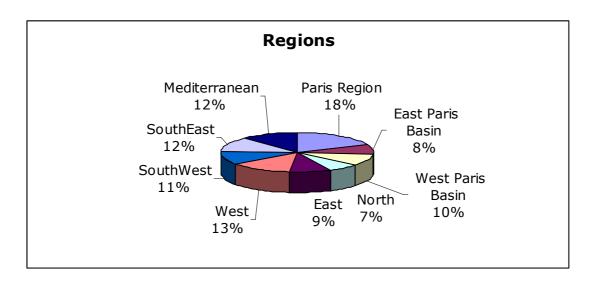
<sup>11</sup> The author of this chapter is not responsible for the sampling of the interviewees or the questions asked.

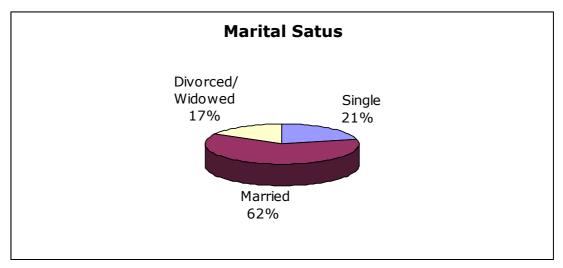
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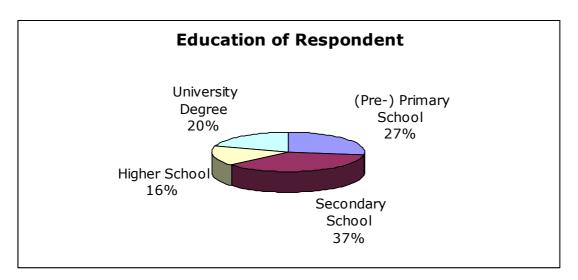


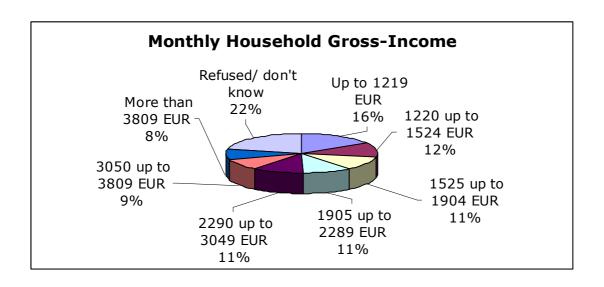








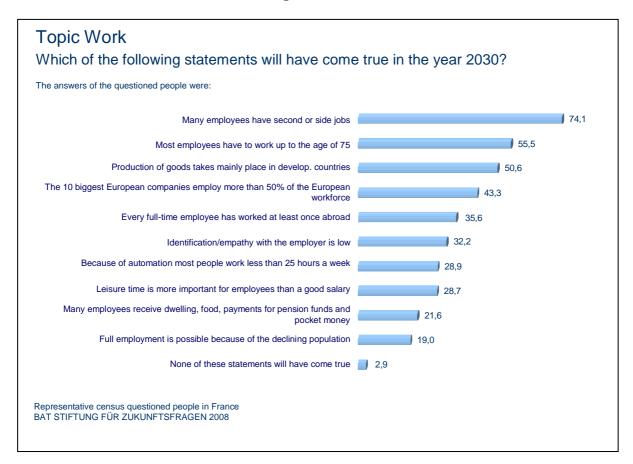




### Work

We have identified two separate themes in this section. One of them is globalisation, encompassing answers to questions 3, 4 and 5 (reading figure 2 from top to bottom). The second is impoverishment (questions 1, 2, 7, 9 and 10). The answer to questions 6 and 8 will be considered in the third subsection entitled "generally accepted ideas".

Figure 2 Work



Globalisation has not yet been achieved. This is portrayed here by three aspects. The first is the division of labour between rich countries and developing countries: opinions are divided amongst the French people questioned regarding a continued increase in the production of goods in developing countries. Some undoubtedly think that relocations will continue, gradually transferring all labour-intensive industries to low-wage countries, whereas others are already forecasting a scaling up of the reverse trend that is beginning to emerge in some sectors in favour of the higher skilled workforce in the rich countries. However, what level of education will the workforce in developing countries have in 2030?

The second aspect considered here is growing corporate concentration. 57% of respondents do not believe that the ten largest European groups will employ more than 50% of the European workforce. Why? Because they do not have confidence in the strength of these groups and their ability to prosper, or because they expect them to be bought out by non-European companies? Because they fear that these groups will look for labour somewhere other than Europe (such as in eastern countries that are not members of the European Union)? Or because this workforce will tend to be employed by foreign firms, like Toyota in the Nord-Pas de Calais region?

The final aspect concerns the idea that each full-time employee will have worked abroad at least once: 64% of respondents do not believe that this could happen between now and 2030. This may be not just because the French usually have a more stay-at-home mentality than their Dutch, English or German counterparts – which affects their geographical mobility – but also because only a small proportion of French workers are employed by international businesses likely to send them to work abroad (about 20%).

Overall, the French therefore seem relatively un-optimistic as regards European or French ability to benefit from globalisation.

### The risks of impoverishment

This probably explains to some extent their pessimism as regards their economic status in 2030. The highest percentages concern the belief that full employment will not be possible despite the falling population (81%), that many employees will then have a second job (74%) and that most of them will have to work until the age of 75 to fund pensions (56%). Here, we can see three of the major concerns of the French emerging very clearly: the fall in purchasing power – seen as a structural phenomenon continuing until 2030 -; the unemployability of some workers placing a drag on the welfare state; and the issue of pensions which, in the absence of a major reform of the system, automatically becomes more critical every day. The combination of these factors rouses fears of ongoing impoverishment. In parallel, the French reject the "Myth of Metropolis" 12: 71% of them do not think that automation will enable working time to be reduced to 25 hours per week and 78% do not believe that their employer will transform their salary into accommodation, food, pension contributions and pocket money, a concept which is probably too futuristic for a culture that is still well rooted in day-to-day pragmatism or, conversely, too backward-looking for a population that still remembers the

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<sup>&</sup>lt;sup>12</sup> Cf. Fritz Lang's film in which automation releases one part of the population but enslaves another, the manual workers, who are totally dependent on their employers.

trappings of domesticity. After the 40-hour week in 1951, then the 39-hour week in 1982 and the 35-hour week in 2000, the French do perhaps understand, firstly, that it is not possible at the current stage of technology to work less than in other countries, with the same hourly productivity, and to be sufficiently competitive and, secondly, that the current pension system – whether through distribution or capitalisation – means that working time must be extended. In this case, perhaps they prefer to work more intensively each week and not so long in terms of lifetime (until the age of 70 rather than 75 for instance).

It should be noted here that French economic growth is essentially the result of domestic demand (household consumption, investment and public expenditure), which explains the direct relationship between falling purchasing power, a stagnating employment market and growth, especially as the US subprime crisis has shown the limits on overindebtedness of households. Conversely, German economic growth is mainly the result of external demand, which probably alters Germans' perceptions of their own economic future.

Generally speaking, therefore, respondents felt that workers' economic position would deteriorate further between now and 2030, in line with a sluggish economic situation in France. As a result, they will have to work more and try to increase their earnings.

The French economy: discontinuity and continuity between 1959 and 2006 Before the 1974 oil crisis, France experienced strong, regular growth, based on dynamic household consumption and corporate investment. Since then, French growth has been both weaker and more volatile. Since the early 1990s, the share of pay in company added value has stabilised at a lower level than the 1960s. It had remained constant until the mid-1970s and then risen until the mid-1980s before falling. Changes in purchasing power, less dynamic since the mid-1970s, have affected household consumption. The corporate investment rate has been falling since the early 1960s, although margins have recovered. Despite the rise in compulsory contributions, the funding requirements of public administrations became higher overall between the early 1960s and the mid-1990s. Source: Jacques BOURNAY, Pierre-Alain PIONNIER, Concepts, Methods and Evaluation of National Accounts Division, INSEE (French institute of economic and statistical information)

### Generally accepted ideas

Finally, answers to the last two questions in this series gave interesting results. For decades, people have been saying that the French are no longer attached to "work" as a value or to the company by which they are employed (contrary to the Americans, for instance). However, only 32% of them say here that identification or empathy with their employers will be low in 2030, which suggests that 68% believe that this will not be true. The box below proves them right, provided that nothing changes between now and 2030.

CSA survey: French employees and the company A high popularity rating for companies and employers: contrary to what is often said about the split between the French and the corporate universe, French companies enjoy a very high public opinion rating. In fact, 79% of employees questioned, whether from the public or the private sector, say they have a good opinion of French companies in general. Only 18% express an unfavourable view.

When moving from the general to the particular, i.e. to their own companies, the majority becomes overwhelming. Almost 9 out of 10 employees questioned say they have a good opinion of their company, of whom 31% express a very good opinion. A high level of employee attachment to their company: contrary to generally accepted ideas, the employees questioned seem to feel a connection with their companies. 81% of them say they are attached, even though only 22% feel very attached. Looking in more detail, the answers show that employees working in the public sector appear more attached to their companies (87%, including 31% very attached) than those in the private sector (80%, with 21% very attached). In addition, it can be seen that attachment to one's company increases with age (78% for those under 35, 81% for those aged between 35 and 49 and 88% for those aged between 50 and 64). On the other hand, the degree of employee attachment does not vary depending on the size of the companies concerned.

The company, a place of fulfilment that satisfies employees overall: almost three quarters of employees questioned say they are satisfied with their company. 63% are even enthusiastic. Looking at the details, it can be seen that these positive feelings are expressed more intensely by employees in small companies (less than 10 employees: 80% satisfaction as against 69% for companies with more than 500 employees) and in the private sector (enthusiasm: 64% for the private sector as against 55% for the public).

Conversely, the most critical feelings towards companies get low approval ratings: 25% feel frustrated (34% amongst employees in the public sector) and 15% (as against 84%) feel indifferent.

Source: CSA, 2003 (http://www.csa-fr.com/dataset/data2003/opi20030522c.htm)

Another generally accepted idea, probably due to the 35-hour week: the French prefer free time to a good salary. Here, only just under 30% say so; while this aspiration increases with age, reaching 35% amongst those over 70, it is only true for 22% of those aged between 20 and 29. Once again, the results are corroborated by existing surveys, as shown in the box below. We are therefore seeing an extrapolation to 2030.

Better pay takes preference over more free time

Six years after the inception of the 35-hour week and against a background of increasing concern over purchasing power, when the French are asked to choose between time and money, a majority favours the latter.

Amongst the working population, 57% prefer better pay and 39% a reduction in their working time. There are differences between the sexes: 60% of working men choose better pay as against 54% of working women.

In the same way, there are age distinctions: 74% of those aged between 15 and 24 also favour better pay. Working people over 50 seem more divided than the young: 51% choose better pay and 42% a reduction in working time.

As regards differing perceptions according to sector, central and local government staff stand out from other employees. 62% of them prefer better pay to a reduction in their working time. This proportion goes down to 57% for employees of private companies and 53% for public sector employees.

Regional differences can also be seen: Alsace and Auvergne are very divided on this issue (49% favouring a reduction in working time and 51% better pay in Alsace, 50-50 in Auvergne). Other regions, such as Poitou-Charentes, PACA and Midi Pyrénées, have a higher than average percentage of respondents favouring better pay (79%, 66% and 65% respectively).

# Relationship between rich and poor

The themes that emerge here are the end of the socialist dream, the failure of upward mobility and the link between fertility and income. Although the US model has shown that capitalism and upward mobility can coexist, socialism and upward mobility have always been closely interconnected in the French model, with capitalism implying notions of elitism and caste (the nobility and then the bourgeoisie).

Topic Relationship between poor and rich Which of the following statements will have come true in the year 2030? The answers of the questioned people were: 80.3 Many employees do not earn enough to save money for Old age poverty is an unsolved problem 75.6 The gap between poor and rich has become wider in 75.1 Life expectancy of rich people is much higher than life expectancy of poor people The middle class has almost disappeared The gap between industrialised nations and developing countries has 39.0 become smaller Educational programs provide children from common families with the same education The government guaranties a minimum income for all – independent of 33.4 age, gender, origin etc. The higher the income the more children the French are able to "afford" The income of top managers has declined None of these statements will have come true | 1.6 Representative census of questioned people in France BAT STIFTUNG FÜR ZUKUNFTSFRAGEN 2008

Figure 3: relationship between rich and poor

### The end of the socialist dream

The results analysed here are certainly in line with the political development of French society. They demonstrate the end of the socialist dream: the expected and intractable impoverishment of pensioners, the continued widening of the gap between rich and poor which also has an impact on health (the life expectancy of the richest being higher than that of the poorest)<sup>13</sup>, the maintenance (if not increase)

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<sup>&</sup>lt;sup>13</sup> On the controversy about the widening of this gap, see Jean-Claude LEFORT, L'OMC a-t-elle perdu le Sud ? – Pour une économie internationale équitable assurant

of higher salaries for top managers and the inability of the State to guarantee a universal minimum income (universal welfare) paint a picture of France in 2030 where "unbridled" capitalism – following the US model as seen by the French – has got the better of hopes of social solidarity with the welfare state as arbiter. This disillusionment is also reflected in the feelings of respondents, only 36% of whom still believe that educational programmes will provide the children of ordinary families with the same educational opportunities as children from intellectual families. According to a study by CREDOC (which researches and observes living conditions)<sup>14</sup>, interest in private education (which has continued to rise significantly since the year 2000) derives firstly from concerns about good teaching, transmission of moral values and a close relationship with teachers and, secondly, for 33% of parents, from disappointment with the public sector as a result of strikes, absenteeism amongst teachers, the constraints of the prescribed list of schools, huge establishments and dogmatism, not to mention what some see as levelling down.

# The failure of upward mobility

Furthermore, it is interesting to note that respondents are very much divided (48% versus 52%) as regards the possibility of seeing the middle class disappear between now and 2030.

The 48% of people who fear its disappearance are either natural pessimists, or those disappointed by current developments who are convinced that the "victory" of individualistic capitalism can only cause the downfall of society: "We watch impotently the impoverishment of the French middle class. (...) The news is not good for the French middle class: recession, loss of purchasing power, unemployment, lack of security, falling property prices, credit restrictions, the decline in public education, etc. Yet French GDP (total wealth produced by all the French) continues to rise, but neither the middle nor the working classes are feeling the benefit." <sup>115</sup>

This vision reflects what is known as the "hour glass effect" , which empties the middle class of substance by impoverishing part of it, while the other part, as it gets richer, moves into the upper class. In this way, the social mobility of the poorest classes towards the richest classes no longer resembles a pyramid but an hour glass.

le développement des pays pauvres, Document d'Information No. 2750, Journaux Officiels, Paris, 2000; Angus MADDISON, L'Économie mondiale – Une perspective millénaire, OCDE, Paris, 2001; Roland GRANIER, "L'écart croissant entre pays riches et pauvres: un autre mythe socialiste", in Le Québécois Libre, Montréal, 16 August 2003, No. 127; Christian MORRISSON, "Inégalités, pauvreté et mondialisation", Commentaire, No. 100, Winter 2002–2003, pages 819 et seq., Paris.

<sup>&</sup>lt;sup>14</sup> Delphine Chauffaut, Christine Olm, Marie-Odile Simon, "L'enseignement libre : choix de conviction mais aussi de pragmatisme". CREDOC, Consommation & Modes de Vie, No. 183, April 2005.

<sup>&</sup>lt;sup>15</sup> "La longue agonie de la classe moyenne française... n'est pas finie", Agora Vox, 25 August 2008; see also Louis Chauvel, *Les classes moyennes à la dérive*, Paris, Seuil, 2006.

<sup>&</sup>lt;sup>16</sup> Alain Lipietz, *La société en sablier*, Paris, La Découverte, 1996.

This perception often rests on the failure of upward social mobility, as certain surveys reveal that the present generations are finding it harder to earn a living than their parents (cf. box).

In the 1970s, France saw the end of a vast wave of upward social mobility. Baby boomers born in the 1940s into working class or peasant families took advantage of the boom period during the thirty years after the Second World War ("Les Trente Glorieuses") and the spread of middle and upper income earning opportunities to climb considerably above their parents' social status. This is the generation that has stayed at the top of the social structure ever since. In the early 1980s, the most favourable position was occupied, on average, by those aged between 35 and 39. Twenty years later, those aged between 35 and 39 find themselves right at the bottom of a social structure... dominated by those aged between 55 and 59. The generations born at the turn of the 1960s have had to cope with the outbreak and persistence of the economic crisis, mass employment becoming a structural component of the economy and less favourable developments in the social structure. (...)

This decline in the prospects of social mobility is felt across the board. For people from the working classes, rising above their parents' social status is becoming increasingly difficult and, in the mid-2000s, the children of manual workers in France are no more likely to leave the working class than they were in the 1970s. For children from better-off families, the risks of downward social mobility have increased sharply: more than one in four children of managers born at the turn of the 1960s now holds a job as manual worker or white collar employee after the age of 40. Overall, regarding the issue of equal opportunity, it seems that there has been a slow levelling down. The gap between the children of managers and those of manual workers in terms of access to managerial jobs diminished slowly between the 1944–1948 and 1964–1968 generations, but there are fewer chances of becoming a manager for the children of all social classes. For the children of the working classes, upward mobility has failed, while for those from the favoured classes the movement is increasingly likely to be downward.

Drawn from: Camille PEUGNY, "Quand l'ascenseur social descend : les conséquences individuelles et collectives du déclassement social", Observatoire des Inégalités, 2007 [report prepared for the Research Division (MIRE) of the Research, Study, Evaluation and Statistics Department (DREES) of the Ministry of Social Affairs (http://www.inegalites.fr/spip.php?article648).

Yet the cause of this failure is now increasingly frequently attributed to the failings of the education system, which can no longer provide the new generations with the means to move on socially, hence the great consistency between answers to the two questions.

### Income level as a driver of fertility?

Finally, this general feeling of disappointment in the French social model as it has sought to define itself since the French Revolution – fluctuating between the desire for freedom and the concern for solidarity – may possibly explain why only 30% of respondents make a connection between French fertility and income level: optimism or pessimism in France – a country of idealism as opposed to German or English pragmatism – seems to be a much better driver of fertility than money.

Here we find the two major conflicting demographic theories. The first establishes a correlation between living standards and fertility, whatever the direction of that correlation, as per Alfred Sauvy's analysis of the "Contemporary demographic revolution", which links fertility to the living standards of young couples, or Josué de Castro's analysis resulting in his Geography of Hunger<sup>17</sup>. The second disconnects fertility from material conditions, as per Notestein's "demographic transition" theory (in which there is spontaneous evolution towards natural demographic balance), whereby we are now moving naturally towards a state of equilibrium with low mortality and low fertility.

Although the statistical data produce curves showing a possible correlation between income level and fertility in both the United States and France, it can be seen in France that this correlation could also be interpreted as a direct relationship between the state of mind of potential parents and actual fertility. In fact, data<sup>18</sup> from INED (French institute of demographic studies) show, for example, that, at the end of a period of continuous economic decline, fertility (TFR) began to rise again in 1977 before collapsing once more in 1983, following one of the worst economic crises of the late 20th century (1982). After a period of relative stability, there was a further collapse in 1993 and 1994 following the 1992 crisis. However, as of 1995, the curve has gradually risen again and, this time, the poor results in 2002 make no difference, as if the renewed optimism at the turn of the century had not been damaged. In conclusion, these responses may suggest that the French social model, based on the welfare state, is considered incapable of taking up present and future challenges. However, they may also simply reflect the fact that the French are tired of the inability of bureaucrats, technocrats or the political class to implement the model, rather than that they reject the model itself. The issue of universal welfare<sup>19</sup>, which has been debated since the 1970s, is a good example. It would appear that, at the start of this new century, the French have chosen pragmatism over idealism: they no longer believe in an improvement of the rich/poor equation, they fear the impoverishment that is likely to accompany their old age, but at the same time their total fertility rate (TFR) has never been so high (196) since 1975, a sign of greater well-being, whether material or psychological.

### Education

Clearly, the French people questioned have grasped the full significance of education. Two themes come out here: firstly, issues concerning the education system itself and, secondly, aspects of the socio-professional context that round out the socio-economic description of France in 2030.

### Changes in the education system

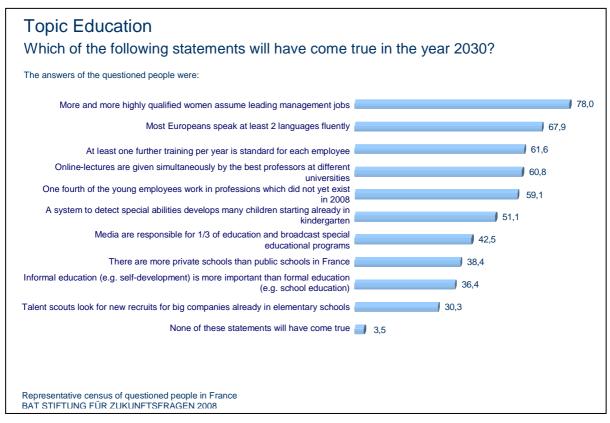
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<sup>&</sup>lt;sup>17</sup> Alfred Sauvy, *Bien-être et population*. Editions sociales françaises, Paris, 1945; Josué de Castro, *Géographie de la Faim*, Seuil, Paris, 1964; Frank W. Notestein, "Population, The Long View", *in* Theodore W. Schultz, Ed., *Food for the World*. Chicago: University of Chicago Press, 1945; see also the remarkable economic demography course taught by Fabrice Mazerolle at the University of Aix-Marseille III.

<sup>18</sup> http://www.ined.fr/fr/pop\_chiffres/france/naissances\_fecondite/evolution\_fecondite/

<sup>&</sup>lt;sup>19</sup> Yannick VANDERBORGHT, Philippe VAN PARIJS, *L'allocation universelle*, Paris: Editions La Découverte, 2005.

Analysis of responses shows first of all a rejection of what one might describe as the US system for France in 2030: more private than public schools, informal education being more important than formal education and, finally, scouting for young talent beginning at primary school level.



**Figure 4 Education** 

This means that, despite their denigration of the French public education system – which leads more and more parents to place their children in private schools as has been seen above – more than 60% of French people do not think that private education will have replaced public education between now and 2030. Is this because, despite everything, they are attached to the public system, the legacy of Jules Ferry, the father of free, non-religious, compulsory education? Or because they do not think that the State, which controls the development of private schools under contract, will allow such expansion? Or again because, very pragmatically, they do not believe that such growth is possible between now and 2030, as private schools (including primary, middle and secondary schools) presently (2006–2007) only represent 13.23% of the total number of schools, a rise of 0.04% since the 2004–2005 school year<sup>20</sup>? Or perhaps because this time they have genuinely succeeded in seeing themselves in 2030, imagining that there has been a sea change and public education has once again become a source of national pride?

<sup>20</sup> L'éducation nationale en chiffes, 2004–2005 and 2006–2007, French Ministry of Education.

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This is probably the same reasoning that leads respondents to think that formal education will still be more important than informal education in 2030 (63.6%). This result can be interpreted in various ways.

From the perspective of the US approach, it can be seen that France has tended to consider its education system as sacred to a large extent, as the source of the country's modernisation (in the 19th century), the creation of the middle-class (20th century) and the integration of citizens of foreign origin (20th/21st century). Both the content and the form of teaching are therefore particularly formal, unlike the US system, which is more flexible and considerably more open to less "intellectual" subjects such as arts, discovery, experimentation, looking at the overall picture rather than taking the analytical approach; in that system, play is even acknowledged as a teaching tool, including in higher education... which is a long way from the French mindset.

From the perspective of the knowledge society, questions might be asked about the relevance of a vision, not just for 2030 but for nowadays, which gives priority to formal education. In fact, knowledge is now everywhere and not just in school. Furthermore, the new generations are no longer prepared to absorb knowledge which now seems both frequently disconnected from real life and quickly rendered obsolete and which is taught in a way that no longer motivates them. Consequently, they get their knowledge from elsewhere, even without realising it and in a hands-on way. It would probably be more useful to teach them to think rather than accumulate information, as well as to develop teaching methods suited to the new generations that stimulate their desire to learn, such as the exemplary Cultures of the Imagination (COTI) competition in the United States<sup>21</sup>.

However, this vision may also be understood from another perspective: the need for certificates. The French education system is based around success in examinations: the former "Certificat d'Etude" (primary school leaving certificate), "Brevet des Collèges" (similar to GCSE) and Baccalauréat. Consequently, there can be no diploma, i.e. evidence of successful learning, except through a formal certification system. A diploma is presently the only way to professional success. From this perspective, whatever the importance given to personal fulfilment through informal education, formal education takes precedence because it quarantees the necessary certification. Finally, one can also take a more sociological approach and wonder whether this response is related to what has been called the "abdication of parental responsibility", as parents are too busy or out of their depth with school curricula, no longer having the time or desire to deal with their children's education, or perhaps discouraged by the teachers themselves who think that they are the only ones who can "teach" pupils. This is to forget, if not to deny, the fundamental role of parents in bringing up children, not only in terms of help with school work but especially in passing on knowledge, processes and the light of understanding<sup>22</sup>. Perhaps it is because the meaning of informal education has been lost that the French educational system has gone downhill, burdened by tasks and responsibilities that are not its role and that it is not able to handle.

This response must also be correlated with the 43% of respondents who say that the media will be responsible for one third of education in 2030 and will broadcast

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<sup>&</sup>lt;sup>21</sup> See http://www.contact-conference.com/archive/educoti.html

<sup>&</sup>lt;sup>22</sup> Defined here as the ability to grasp the meaning of an object or context, as can be seen developing in very small children.

specific educational programmes. From the way the question is framed, it is clear that formal education is also meant here. If that were to be the case in 2030, we would be going back to the trend of the 1970s – the start of mass education – with televised educational programmes such as those with which CNAM (French school of engineering and technology) experimented at the time. However, a majority of respondents (57%) do not believe that this will happen, probably because of the deterioration of TV programmes and also the more contemporary solution of remote learning via the Internet.

Finally, the last component of this rejected US approach, in which the private takes precedence and the self-taught self-made man is glorified: large companies scouting for young talent from primary school onwards. Only 30% of respondents believe this could happen, but that is quite a high percentage if one considers how far removed this practice is from French culture. Nevertheless, it is developing in sport, where high-level clubs look for rare pearls at the youngest age. As individual competition becomes global<sup>23</sup>, employers' demands increase and large corporations devote more resources to recruitment and human resource management, it would therefore be quite logical for the practice of scouting for young talent to develop further between now and 2030. Although whether it is justified to start at primary school level is another matter.

Beyond this rejection, which suggests that the French education system will still be the same in 2030, resisting any Americanisation, two aspects reflecting its modernisation do emerge, one concerning nursery school and the other university. Just over half of respondents think that a system to detect special abilities amongst children will help their development, starting in nursery school. Here again, in the absence of known data on the matter (screening for precocious children, for example, is not yet well developed), respondents drew on their natural optimism and pessimism in their answers. The slight bias towards optimism is therefore encouraging.

In the same vein, 61% of respondents think that, in 2030, the best lecturers will give their lectures on-line simultaneously in several universities. In reality, this is already technically possible now, but it is still costly in view of the technology used, as videoconferencing involves substantial hardware and expensive transmission. However, it is entirely feasible that, well before 2030, a lecturer will be able to deliver his lecture to a physically empty but virtually full room of remote students. This would feed into the transformation that universities are currently undergoing in their race for performance, internationalisation and cost rationalisation<sup>24</sup>.

The responses concerning changes in the education system between now and 2030 show that there is a wish to retain French-style education, differing from the US approach, rooted in republican values, but improved and modernised. This vision is coherent with the resolutely optimistic view of a socio-professional context more suited to the challenges of the 21st century.

### Socio-professional context

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<sup>&</sup>lt;sup>23</sup> See "globalisation 3.0" according to Thomas L. Friedman, *The World is Flat*, New York: Penguin, 2nd Rev. Ed., 2007.

<sup>&</sup>lt;sup>24</sup> Fabienne Goux-Baudiment, "Universitas versus University", communication to the Global Human Resources Forum, Seoul (Korea), 25 October 2007.

The socio-professional context in France in 2030 has four defining features. First of all, more and more highly qualified women will hold top management jobs, according to 78% of respondents. This development corresponds to the trend seen over the last few decades. It also seems to be the logical consequence of greater equality of treatment for men and women (breaking through the glass ceiling), partly due to widespread co-education, a greater desire amongst women to have a career, whether as a result of financial necessity (single parent, caring for aged parents, etc.) or stimulated by fewer family restrictions (development of domestic services, good childcare system, etc.) and the recent but widespread trend for girls to obtain better school and university results.

Another aspect of the situation, related to both education and globalisation: in 2030, most Europeans will speak at least two languages fluently. In reality, this is already the case, especially in countries sharing a similar culture such as Germany, Benelux, Denmark and the Scandinavian countries, Switzerland and the border regions. In France, a foreign language is compulsory for all children, from primary school onwards. However, learning a language is one thing. Using it is another. Becoming fluent in a foreign language implies, at least in France, a genuine socio-cultural shift: books and films would have to be available in foreign languages, foreign television channels would have to be received and watched, specific programmes would have to appear on national channels, more foreign terms would have to be used in advertising, for example, as seen in Turkey or Italy, and the very methods of teaching foreign languages at school would have to change. In this respect, attention should be drawn to the very positive role of online games, whose language medium is English and which thereby oblige a whole generation, mainly boys, to use it and, secondly, social networking sites such as Facebook which provide the girls of that generation with the opportunity to use English.

Failing this, speaking English could result from increased use in the professional environment, but that will certainly involve fewer people, as we have seen with the impact of globalisation.

Next, further training plays an important role in this socio-professional context: 62% of respondents think that at least one course of in-depth training a year will be standard for every employee in 2030. The question of lifelong learning has been discussed so often in France over the last few decades that it might be considered surprising that positive responses amounted to only 62%. Why do the other 38% not feel this way? If we look at this topic in the light of the belief that many employees will have a second job or taking the existing data on stress at work into account, this result could be interpreted as suggesting that the French will not have the time to receive further training, or at least not every year and not in depth.

Last but not least, 59% of respondents think that one quarter of young employees in 2030 will be doing jobs that do not exist in 2008. This response reveals a degree of openness towards the future, which will not just be "more of the same" or "business as usual" but will bring something new. This optimistic view is also realistic insofar as past decades have seen a large number of jobs disappear and appear, largely as a result of technological advances. Present research<sup>25</sup> into innovation shows that such advances take place at the interface between different fields such as biology and

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<sup>&</sup>lt;sup>25</sup> Goux Baudiment, Fabienne, Jones, Christopher, "Inventing the future", in Corsi P., Christofol, H., Richir S., Samier, H., *Innovation Engineering: The power of intangible networks*, Hermes, London, 2005, pp 3-24.

computer science (biocomputing), the food and pharmaceutical industries (alicaments), chemistry and textiles (intelligent textiles), etc., hence the new jobs that will be associated with them (this is how the job of computer graphics artist came into being, for example). Moreover, the application of new technologies will need new skills such as those of exobiologists, who can now study life on other planets, or nanotechnologists.

Consequently, this view of the future socio-professional context seems quite optimistic: gender equality has increased, most professionals speak two languages fluently and undertake further training and many new jobs have come into being.

### Conclusion

The three fields examined have produced diverging views of the world. The world of work is dominated by marked pessimism: declining purchasing power, need to work more, inability of France to find its place in globalisation, the burden of pensions. 2030 is entirely in keeping with this decline or, at best, stagnation. The relationship between rich and poor, generally speaking, seems likely to hinge on two distinct factors in 2030: a widening gap, both in France and abroad, which could endanger the very existence of the middle class; and a welfare state that no longer plays its role and no longer ensures the operation of upward social mobility. A vision that is more lucid than pessimistic, in logical correlation with the abovementioned vision of the world of work.

It is in the field of education and the socio-professional world that the vision is fundamentally optimistic. The transition from the two previous worlds is ensured by French fertility, the high rate of which tells us far more than surveys on confidence in the future. For these children, the French want to have to an educational system that still enshrines republican values but is more efficient and able to usher the children into a fairer world of work (gender equality), in which workers are bilingual and trained on an ongoing basis, ready to take up new professions.

For the people interviewed, France in 2030 will be neither a blissful paradise nor a degenerate hell, but an old, real country whose driving force is its inhabitants' confidence in the future and their ability to look after themselves again when the State can no longer do so.

Annexe 1: "The future, right now" Jacqueline REMY, 19/10/00, L'Express No. 2572

The survey carried out for the Economic and Social Council speaks for itself: according to a majority of French people, tomorrow is in the present tense. And they want to be actors in their own future.

What future do we want? Who should lead the change? Based on which values and which priorities? In preparation for its first Biennial Forum on the Future, to be held on 18 and 19 October at Palais d'Iéna, Paris, the Economic and Social Council asked the CSA and Ernst & Young to carry out a survey amongst the French about their fears, expectations and hopes. The results, published in detail exclusively by L'Express, are both surprising and worrying: the future is not what it was.

The future, in the 1950s, was the year 2000, a slightly frightening horizon, peopled with impersonal hyped-up humanoids, flanked by robots and flying machines. Fifty years later, in the eyes of the French, the future is still ... the year 2000 – today, now - and not a hypothetical 2050 or even 2020. The more qualifications that respondents have (65%), the more categorical they are: the future is right now. Why, when asked this slightly metaphysical question, do the French refuse to dream, to look ahead, to pick up their binoculars? It might be lack of interest, pessimism or extreme lucidity. If you no longer believe in the eternity promised by the gods, if you no longer identify with humanity as a whole, if you think you are writing your individual destiny, far-off horizons offer no more than speculative interest. It is easier for everyone to see the future in terms of what will happen to them personally on this earth or, at best, their children's future. A matter of faith. Of culture. Or simply of attitude: in the end, it's as if the French had decided to make the future their own, to play a part in it and shape it. They have the keen feeling that everything, these days, is changing rapidly and that, if "the present is pregnant with the future" as Leibniz said, then the birth is always imminent. They can already see the future framed in their windows and are declaring their interest.

This kind of relaxed attitude is striking in view of the upheavals the world is likely to experience. The French questioned by CSA do not find the future terrifying. They are even extraordinarily enthusiastic. This enthusiasm reflects a fairly newly discovered optimism, if we remember that the French, just two years ago, stood out for their gloominess and came at the bottom of the list in surveys of Europeans' morale. This optimism is actually coupled with an absolute need for control; that is the key to this survey.

The more the French have the feeling of controlling the future, the less they fear it. The more they have the impression of being dominated by change, the more they mistrust it. The more they have the intellectual, social or financial means to channel the changes that occur, the more optimistic they are. And because it is easier to control what is close by, within range of voice or arm's reach, they accept changes in their immediate environment more readily than those affecting the national or global community. On condition that these changes receive the seal of approval from citizens or, failing this, the leaders they have put in place.

This is because, displaying a degree of modesty, even though they feel that the future is in the present tense, two-thirds of the French do not demand copyright: only 32% think they will be "actors in change". It's a matter of age to some extent: 43% of those aged between 18 and 24 see themselves as actors and this proportion goes down slowly over time, reaching 16% for those aged over 65. But not entirely:

money, social status, qualifications and sometimes sex – power, in other words – also make a difference. 69% of people who feel they play a role in shaking up the world say they are optimistic about the future (against an average of 56%). If we try to identify the most pessimistic French people, we come up with the ones who say they are confined to the role of observers of the trend: those without qualification, the most disadvantaged but also, as Stéphane Rozès, research director at CSA, explains, manual workers, because they are in a subordinate position, and housewives, deprived of social connections and weakened by their unflattering portrayal in the media.

Change? OK, but which change? The French overwhelmingly support community life, public transport, private cars and the development of the Internet. It doesn't matter that cars pollute and hinder public transport; it doesn't matter that only 4.5% of them subscribe to the web, the French are commending two things here: 1) whatever creates a social connection; and 2) whatever they can choose for themselves. Conversely, anything that is decided outside the realm and control of citizens is viewed with suspicion. The people questioned clearly reject four change factors they consider harmful: the construction of Europe "as it is proceeding presently", the environmental situation, economic globalisation and the role of politicians on a national scale – whereas the latter are still considered bearable at local level (with 50% of respondents expressing a positive opinion). Internet, biotechnology, transport: future signs are seen as positive, but the French want a few beacons along the way. Goodbye fluidity, mobility and flexibility! "My own small business" is not really the stuff of dreams. People want, for themselves or their children, one boss, preferably full-time, in a big company that has a more social than commercial bias, with a real salary if possible. 38% of employees in the private sector prefer the public sector. The opposite is true for 30% of public sector workers. The young are barely more adventurous than the average, except on one point: 45% of those aged between 18 and 24 would like to work for themselves. Conversely, the gap between women and men is widening. Women tip the balance in favour of reassuring options, with just two exceptions: they prefer part-time work and more of them than men (42% as against 34%) get into starting up new businesses. People would like a bucolic future, with their own house, flowers, a fire in the chimney, a car in the garden and tradespeople they know – only managers (19%) showed some interest in e-business. In fact, people want a future that looks like an old-time picture book, with new technology added in. Half of all Parisians would like to live in the countryside and say they are ready to get rid of the sacrosanct car which, for managers and graduates, is no longer needed for show. Moreover, money is not amongst the values that, in the eyes of the French, should take priority in tomorrow's society, nor are pleasure, competition or even spirituality or commitment. What are the priorities then? Tolerance, freedom, solidarity and work, but especially honesty and, way out in front, family.

The days of the blank cheque are over

Change, not just anyhow and not too quickly, we are not in a hurry. Two out of three French people would like change to be spaced out over time. Those with the fewest qualifications and the youngest, on the other hand, would like things to move on and fast. Curiously, it is also the people least well integrated socially who say they are ready to submit to the new technologies. The vast majority of the French think

that these brand new tools should adapt to society and not the other way round. But who is "society"?

In any event, not governments, certainly not. Only one in three French people thinks that rulers should be allowed to take the lead. This is an alarming defeat for politicians. For if a society must not allow itself to be led by the storms of change and the leadership of ministers and heads of state is rejected, to whom must the keys to the future be entrusted? The simple, harsh response of the people questioned should give pause for thought to the Economic and Social Council, as it seeks to prepare for the future: definitely not religious leaders, nor technocrats, nor journalists, nor financiers, nor trade unionists. None of these people, who think for us, are authorised to prepare for the future we want. Being slightly more enlightened, company directors and scientists are considered as essential guides. However, to cook up the future, the French really only trust the citizens (51%), i.e. themselves, possibly assisted by elected representatives (28%) dependent on their votes. Clearly, citizens want to take responsibility for imposing "their" changes on politicians: the days of blank cheques are over.

So, yes to the future right away. But change if I want, when I want and how I want it.

Germany: Europe 2030 – Germany's View of the Future

Pero Mićić and Enno Däneke

Introduction: Views of the Future

Historic records are full of false predictions. It is obvious that the future is not predictable. Nevertheless, it is worthwhile thinking about possible futures and their implications for society, the organisation one works for and last but not least for oneself. When thinking about or looking at different futures it is important to keep in mind the different views by which the future can be analysed. The most important distinction is the differentiation of the active and the passive view on the future.

In the passive view we ask what the future would most likely hold, given all the information we have today on trends, technologies and other drivers of change. Surprising events and developments are also a phenomenon we look at with a passive view. We thereby try to understand the probable future. Taking the active view, on the other hand, we ask how we could shape the future and influence the directions of change in a preferred way. We try to perceive and seize the creatable future. Noticeably, these two perspectives are interlinked with each other. While our expectations of future probabilities shape our decisions on how we should act today, our actions today influence and change the probabilities of possible future developments.

This study is focused on the passive view, i.e. on the possible and probable events and development in the environment.

# The Survey

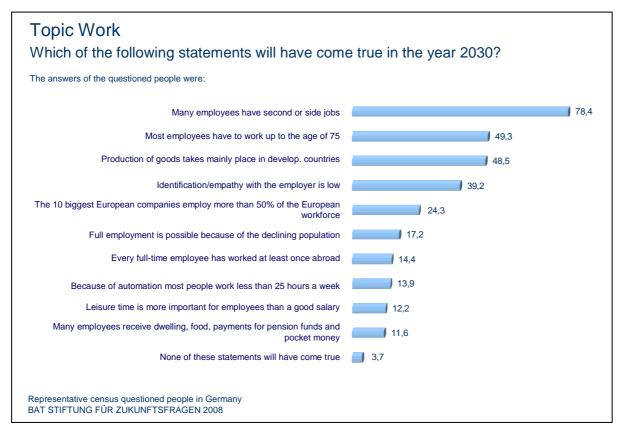
In June 2008, the BAT Stiftung für Zukunftsfragen surveyed a representative sample of the German public regarding their expectations about the future of Europe. The survey focused on different areas of the social and economic environment. People were asked to evaluate independent statements on the future of Europe and whether these statements would reflect reality by 2030. Thus, the participants were requested to take a passive view on the future (see above), making it possible to reveal what people in Germany expect to be the probable developments, regardless of what they would see as preferable or achievable options. Even though this does, of course, not constitute a prediction of the future, it is interesting to compare one's own view with those of the majority and reflect on the arguments they could have considered in building their opinion.

In an entrepreneurial context, the results can be a benchmark and measure when analysing the underlying assumptions of the company's strategy and long-term goals. Would the strategy be sustainable in the world described? In a political context, the survey points to necessary policy changes and to the hopes and fears of the population that need to be considered in political decisions.

### The Expected Future

People in Germany agree in several areas on which aspects of our society will change in the future and which they rather expect to remain the same. Some other issues on the other hand are very controversial. So what kind of Europe 2030 does the majority of Germans expect? What are the controversial issues? What does this mean for us today?

#### Work



In terms of the work environment, most Germans are convinced that many employees will have second or side jobs to enhance their standard of living in 2030. At the same time they do not believe that the declining population will have a positive impact on labour markets. They do not see the possibility of full employment. In terms of work-related values, most people do not see many changes. Only twelve percent believe in a shift towards a more leisure-oriented society, while the rest believe that good salaries will still be more important than leisure time. A massive reduction in the weekly workload as a result of automation would be surprising to most Germans as well, as they do not expect this kind of development. A controversial issue is the probability of further increases in the retirement age. About half of the population believes that most people will have to work up to the age of 75, while the other half seems to believe that recent reforms in the German retirement system (including an increase in the retirement age from 65 to 67 years of age) will be sufficient to deal with future demographic changes.

In terms of the international division of labour, German opinions diverge on whether most production of industrial goods will take place in developing countries with about one half supporting this statement and one half opposing it.

To sum up, Germans are convinced that most people will need to work in several jobs simultaneously in order to keep their good salaries, which they value more than their leisure time. They do not expect full employment and some are already prepared to work until they are much older.

Germans hold mixed views on the future of work. Many see the demographic shift towards an older society as a still unresolved problem. There is little hope that population shrinkage, which most demographic institutes expect will begin in 2020, could have a beneficial effect on the labour market.

Germans generally expect to be working more rather than less in the future. Even though leisure time is highly valued, Germans fear losing their standard of living. Most of them seem to be prepared to work in several jobs simultaneously. At least they regard this to be the norm in 2030. These expectations reflect the effects of some major long-term social trends and political factors. The issue of the aging society is known in Germany since Lotze's book "Volkstod - die kommende Vergreisung" was published in 1932. Awareness of this issue seems to have finally reached the mainstream. The issue is amplified by the problem of governmental debt. Both factors together make current social systems unsustainable. At the same time, this willingness to work more and longer is also an expression of greater flexibility and entrepreneurial spirit within German society. In terms of working hours, these trends could be countered by increasing individualisation in society and a stronger focus on health and a work/life balance, which could lead to a greater focus on leisure time. For the majority of Germans, financial limitations and a fear of poverty in old age seem to be the dominating factor, making a self-realisation in leisureoriented activities a model for a privileged minority.

# Relationship between the rich and the poor

Germans have clear assumptions on the relationship between the rich and the poor in the future. They expect a much stronger polarisation of wealth resulting in a wider gap between rich and poor. They expect the middle class to disappear and many people to become unable to save money for their retirement, which will result in an unresolved problem of poverty among the elderly. This gap will not be narrowed significantly by government intervention, according to the expectations of the majority of Germans. Government will neither guarantee a minimum income for all, nor will educational programmes provide children from poorer families with the same education.

Furthermore, they do not believe in a narrowing of the international wealth gap. Only one in every six Germans believes that the gap between developing and developed countries will become smaller.

The expected polarisation of wealth within the society mirrors the development of recent years. The middle class, which was and still is the backbone of German society and the German economy seems to be disappearing. It is not a big surprise that Germans see many problems arising from this trend. They see a rich upper class emerging as well as a poor lower class who they believe will have problems in sustaining themselves throughout their life. As the demographic shift results in a higher degree of self-responsibility in the social systems, people from the poorer echelons of society might not be able to save for their retirement. This problem would be exacerbated if prices for everyday products continue to rise (see consumption).

The state will not be able to keep the present kind of redistribution machinery alive. Instead, the burden of government debt will make the state more and more incapable of action in the future. Already today, interest payments make up a major part of the budget. Since there are no signs of significant budget consolidation, it

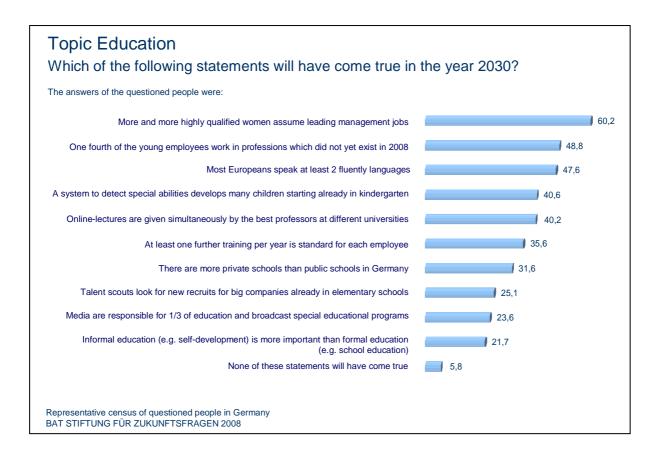
does not seem very likely that there would be any positive changes in this regard. In addition, state responsibilities are likely to rise in the future. The aging society is causing pension costs to explode. In addition, the healthcare system has to deal with technological advances which allow new, but mostly expensive treatments. Politicians need to find ways to finance educational programmes which provide equal opportunities for every child (see education). Germans do not yet expect a solution to be found by 2030. Thus, it is even more important to develop and implement reforms to make the social systems sustainable and fair.

German pessimism regarding the international wealth gap might be described as a traditional German mindset. Nevertheless, great success has been achieved in the recent past in closing the gap between some developing countries and the industrialised world. Advances in East and South Asia have been particularly significant. However, there is still a gap. But it becomes smaller year by year. Developments in other parts of the world, especially in Africa, have been less positive. This is probably what Germans refer to when they express their doubts about the possibilities of developing countries catching up. They do not see any signs of how these poorest countries could develop fast enough to gain on the industrialised world.

### Education

The probable future of education is highly controversial. About half of the population believes that one quarter of young employees will work in professions which do not yet exist in 2008. Sixty percent assume a growing proportion of women in leading management jobs. Nevertheless, only a minority sees significant changes in education systems and methods. The most probable (or least improbable) change according to the German public would be a system to detect special abilities in children that could be developed from kindergarten age. However, two out of five believe in the emergence of such a system. A similar number believe that there will be simultaneous online lectures at different universities. Less than a third of respondents believe in a dominating role of private schools in Germany or in an important role of the media in education. Finally, the majority of Germans are convinced that a proactive approach to learning will not prevail. Only every fifth respondent believes that informal education (e.g. self-development) will be considered to be more important than formal education (e.g. school education). Similarly, they do not expect at least one professional training course per year to standard for employees.

Overall, at least half of the population sees greater changes ahead in educational needs as the expected appearance of new professions suggests. This is supported by the increasing rate of change, which is caused by technological progress in computing and knowledge systems, by mobilisation and the Internet and by increasing competitive rivalry in most markets. New technologies, markets and business models foster the emergence of new professions. Yet the majority of respondents are not convinced that there might be a need for a higher level of initiative regarding education and self-development.



Changes in the educational system are inevitable. As the rate of change increases further in all areas from society to economy to technology, this makes continuous and life-long learning and self-development essential for everybody. Half of the population expects that by 2030 one third of young employees will work in professions that do not even exist today. This indicates that existing professions will also go through greater changes and some might even disappear. Continuous personal development and regular training must become the norm. From this point of view, the expectations of the German public are surprising. The population seems to ignore or suppress what is almost inevitable.

### Security

Two thirds of Germans believe that organised crime will be a major problem in all European countries. Moreover, they believe in a strong increase in Internet-related crime. Even warlike conflicts about natural resources like oil, gas or drinking water do not seem unrealistic to most Germans, since 57 percent believe these will be commonplace in 2030. To sum up, the expectation is that European societies will be less secure than they are today.

Will this cause a shift in values making security more important than privacy? According to the Germans, this will not be the case. Only one third assumes this shift will happen in society. Most Germans also do not expect (and maybe do not want) innovative technology to be massively used in crime prevention and investigation. Surveillance systems that identify criminals directly when committing a crime are expected by 37 percent of respondents, while almost two thirds seem to be convinced that the systems would not be capable of performing this task or that they will not be used. The reason is that the protection of privacy remains an important

value. The potential role of European or international data transfer which could help to solve crime faster is similarly doubted. Finally, the use of implanted chips for localisation and identification purposes is the least likely security measure, since only twenty percent expect this kind of development. On the other hand, two out of five Germans believe that harsher punishment with higher penalties for criminal acts will be the norm.

An important fact for immigration policy (see integration) is that many Germans (about 40 percent) are convinced that the crime rates of foreigners and immigrants will double that of natives. This expectation is in itself already an obstacle for the integration of foreigners.

The results show that people in Germany are concerned about a possible increase in the number of crimes and emerging threats from the "digital world". They do not believe, however, that this will cause a decline in the importance of the protection of privacy. Measures to increase the security within society should thus always consider privacy issues. Massive intrusions like implanted chips for identifying and locating people are not considered probable because most people would not be willing to accept this level of control.

Biometric systems, information technology, satellite navigation, sensor technology, tracking and tracing systems and artificial intelligence including pattern recognition could, in theory, be combined to build highly sophisticated surveillance systems. These could monitor most private and public actions, automatically derive conclusions and identify potential threats.

### Family

More than two thirds of Germans expect that most couples living together will not be married in 2030. At the same time, forty percent believe every third partnership, cohabitation or marriage is going to result from Internet dating networks. In order to deal with the larger number of older citizens, some Germans expect new forms of care facilities. Day-care centres for senior citizens and numerous flat-sharing arrangements among older people are expected to be common place by approximately fifty percent of respondents in each case.

Regarding children, Germans do not expect a new "baby boom". Only every fifth interviewee believes in an average of two children per woman. They do not see breakthroughs in biotechnology being applied to artificial insemination, making it possible to select sex, hair colour and size of children. Three out of four Germans do not expect this possibility by 2030.

The changes described are strongly influenced by the aging society and long-term trends like individualisation, feminisation and a more open and tolerant society. These are the drivers for the declining role of the "traditional family". They also allow for new innovative approaches like day care for elderly people. Concepts like this will probably become more acceptable to the general public but it does not seem that they will become a mainstream phenomenon for a number of years. There are also no perceptible signs suggesting that a shift in values could cause a new baby boom, which makes this assumption highly plausible. Furthermore, even if women did suddenly start to have more children again, it is unlikely that this would have a significant and sustainable effect on the demographic trends that we have been experiencing for several decades.

### **Environment**

More than sixty percent of Germans expect energy prices to rise to a level where utilities for a flat will amount to the same costs as the rent for the flat itself. At the same time, every second German believes that half of the energy supply will be covered by solar and wind energy, but ninety percent do not believe in a "technological solution" for climate change to be developed by 2030. Weather control systems with meteorological stations which generate rain, sun or snow where it is required are seen to be science fiction rather than a realistic development by the vast majority.

Germans also do not see a solution to hunger in genetically modified food. Only about one in ten expects hunger not to be an issue in the future. In contrast, almost half of Germans even expect many people in developing countries to starve due to the increased use of land to grow more plants for regenerative energy instead of food. People tend to overrate current problems and project them into the future.

Germans are very pessimistic about the future of environmental pollution, since they assume that clean drinking water will be a luxury item even in Europe and that pollution might be the primary cause of death. Even though their fears might be exaggerated, the voice of the very pessimistic minority should not be ignored. The shortage of drinking water is a global problem and highly significant even in Europe. International cooperation is especially difficult in this area, as the particular interests of individual countries are often opposed to the global interest. So, despite some advances, pollution remains a key issue in most developing and some industrialised countries.

The results of this section could be influenced by current media attention. Climate change and rising energy prices received massive media coverage immediately before and during the survey. Nevertheless, rising energy prices are inevitable in the long term. The supply of fossil fuels is limited while demand seems to be ever rising in line with economic development. Climate change is considered a fact by most scientists today. Awareness about the problem and the potential cost recently rose significantly. Thus, there is hope that a solution might be found. Climate change can probably not be stopped, but a strategy to slow it down by reducing greenhouse gases and finding solutions to adapt to potential consequences might prove successful.

### Consumption

In 2030, Germans are convinced that everyday products like food will be much more expensive than they are today. Regarding the modes of production and changes in consumer behaviour, however, there is much less agreement. On the question of whether half of all products will come from Asia, Germans are split fifty-fifty. On the other hand, there are only a few people in Germany who believe that food products will mainly be produced domestically. At the same time, Internet sales might climb, but only slightly over one third of the Germans believe that "most products" will be bought this way in 2030. Therefore, retail shopping remains very important for them. The majority of respondents do not believe in a change in consumer behaviour and a world where time and tranquillity are the real luxury, service and advice are more important than a low price, most people buy eco-friendly products and the biggest

proportion of consumer spending is allocated to the health sector. One third believes that this sector will account for the biggest proportion of consumer spending.

Germans expect consumption behaviour to remain relatively unchanged. The majority do not envisage greater importance being attached to time and tranquillity. One third on the other hand believe that these values represent the luxury of the future. These are probably people who are already experiencing the increasing rate of change and rising complexity levels. They are looking for a deceleration of their lives. That is why values like tranquillity and time are and will be highly relevant for a significant part of society and should not be neglected. These people will voice their need for convenience and demand time-saving and easy-to-use products and services. The same is true for eco-friendly (green) products. The growing importance of the health sector in consumer spending is also plausible. Technological innovations and a growing trend towards a healthier life support this hypothesis.

# Integration

Integration is another controversial issue in Germany. Except for the statement that most immigrants will live together with other immigrants in certain districts, which is assumed to be the case by a slight majority, only a minority of respondents, albeit a relatively large minority, expect that most of the other projections in the survey will become a reality.

More than two thirds do not expect faith and religion to play an important role in immigration policy of the future. At the same time, an equal number of interviewees are optimistic in that they do not assume integration to work only with educated immigrants. But they also do not expect immigration to become any easier.

Finally, Germans agree that it is improbable that Europe would close its borders to non-Europeans in order to counteract people's fears. But even though the encouragement of immigration is discussed widely as a possibility to counteract aging societies, three out of four Germans do not believe it will be widely implemented among European countries.

The expectations imply some possible challenges in relation to immigration in the future. The fact that more than half of the population expects that immigrants will be mainly living together with other immigrants in the future and only one in five believes in easier integration of immigrants in the future, shows that there is significant doubt as to whether foreigners can be integrated successfully into European societies.

Thus, immigration policies and integration initiatives need to be reassessed. Integration needs to receive high-level attention from politicians, especially if it is meant to be used as a countermeasure to aging societies. Two out of five respondents believe that there will be more immigrants from developing countries than from the EU. Should they be right, immigration could possibly become even more difficult, as cultural differences would grow.

### **Summary**

The world Germans expect is characterised by greater complexity and diversity, for example with the emergence of new professions, less traditional families and new forms of caring for the old. They also see challenges ahead regarding the integration of foreigners. Rising prices for energy and everyday products mean that most people

will have to work more and longer. Many will have second or side jobs. At the same time, Germans do not believe that full employment is achievable. This contrast will result in a polarisation of wealth and a shrinking middle class. As state budgets will be heavily constrained, educational systems could be affected as well. In education, equal opportunities for the poor and the rich may be less likely than they are today. In the face of greater complexity and an increasing rate of change, those who have the financial means will place a high value on time, tranquillity, service and advice, making them their major criteria for buying and consumption decisions. For the rest of society, price will remain as important as it is today.

Even though organised crime and Internet-related crime are important issues, security will probably not become the major societal value of the future. Instead, all new security measures will need to be balanced towards the protection of privacy. At a global level, Germans do not see immediate solutions for major problems like climate change or world hunger.

# **Implications**

The assumed scenarios described above pinpoint several challenges for European society.

The polarisation of wealth and the disappearance of the middle class is a potential cause for conflict. The issue is amplified by rising prices which hit people with lower incomes harder. A main cause for the polarisation of wealth is the polarisation of work: As new professions emerge and old ones disappear, a shortage of skilled labour in some areas exists at the same time as an over-supply of potential employees with qualifications which are no longer needed. Therefore the polarisation cannot be tackled by a social system for the redistribution of wealth. A fair society is not characterised by an equal distribution of income and wealth, but by an equal distribution of opportunities. Because of this, the unskilled (or wrong-skilled) need to be enabled and allowed to take the initiative for personal development. The "entrepreneurisation" of the world of work, which many more employees are open to now than a few years ago will be promoted.

The education system can play an important role in this context. As the rate of change increases and the complexity of our environment rises, the most important skills will be the ability to learn and the flexibility to change. Knowledge is the only resource which increases through use. Knowledge available worldwide therefore doubles in increasingly short periods of time. At the same time as the quantity of knowledge explodes, its contents are outdated at a faster and faster rate. The acquisition of knowledge often cannot keep up with developments. Lifelong learning and "knowledge about the right knowledge at the right time and place" are becoming critical competitive factors. In view of this, the fact that only one in five Germans attaches greater importance to self-development than to formal school education could be seen as a warning sign. There still seems to be a lot of convincing to be done.

On the other hand, Germans are well aware of some challenges that might lie ahead. Appreciating the aging of European societies, they seem to be prepared to take second or side jobs in order to be able to save for their retirement. Many also expect to work up to an older age.

Germans are very concerned about rising prices for energy and everyday products. Despite the fact that this result might well be influenced by strong short-term

increases immediately before and during the field time of the survey, there are several trends and developments supporting this assumption. The previously mentioned advances made by developing countries have meant increased demand for many goods from wheat to oil, putting pressure on prices. Global shortages of oil and drinking water also contribute to the trend. To counter this trend savings are necessary. Energy in particular can be employed more efficiently, leading to significant changes. Moreover, further research for oil substitutes, new drinking water abstraction and energy generation technologies as well as more efficient production in agriculture is needed.

The advances made by developing countries are a controversial issue among Germans. Only very few think that the gap between developing and industrialised countries will narrow significantly. On the other hand, almost half of the respondents believe that the production of goods will take place mainly in developing countries. If industrialisation proceeds in developed countries, however (and there are few signs that it won't), the standard of living will inevitably rise. The greatest potential for economic growth and new markets currently lies in Asia, obviously. But even Africa could have a chance, if the necessary economic reforms are implemented and problems like corruption, product piracy and legal uncertainties are tackled. The average income per person in China has more than quadrupled in the past 20 years. Even though the average income in purchasing power in the United States is still about five times that of China, it used to be about thirteen times as high 20 years ago. The economic reforms and opening up of domestic markets starting in the seventies were the basis for this upsurge. Less developed countries could learn from this and other examples and combine their strategies with approaches specific to their country and culture to achieve similar successes. Of course it is highly unlikely that the gap between the richest and the poorest countries will be closed by 2030, but a narrowing of the gap is entirely possible.

In general, when viewing the future of Europe, most Germans seem to be carefully optimistic. Although they see a couple of challenges ahead, these seem to be solvable if the right steps are taken.

## Germany: Gloomy prospects but one glimmer of light

Karlheinz Steinmüller

Images of the future are efficacious. People's hopes and fears, expectations and desires determine how the future will be. After all, it is through these hopes and fears that they express their perceptions of the future and are motivated to act in a particular way. Politicians and businesses respond to these desires and expectations and to what citizens see as risks or opportunities.

Nevertheless, population surveys are not a suitable tool for predicting the future. It's true that they reflect hopes and fears for the future and that they illuminate individual and societal expectations. However, these expectations are rooted firmly in the present and are sometimes nothing more than a reflex response to current issues. In addition, a survey captures all the contradictions inherent in the images of the future that prevail throughout a society: expectations diverge wildly, desires vary, fears differ. But even individual views of the future are themselves anything other than closed, coherent blueprints, not consistent scenarios. On the contrary, such views consist of fragments, expectations regarding individual issues or separate problems, which, taken in isolation, appear to be plausible but do not necessarily conform to the overall picture. Take the issue of energy for example. More than half of those surveyed expect a breakthrough in the use of alternative energy sources by 2030. However, at the same time, a majority of almost two thirds fear that the cost of energy will exceed what they pay in rent. At least one in six respondents therefore expects both scenarios simultaneously. At the outside, both expectations are compatible if it is assumed that the very high initial costs for renewables will continue. Hidden inconsistencies, such as those seen here in the energy example, do not devalue the survey however. On the contrary! They actually prove that a struggle about the future is taking place, even when it comes to how the future is pictured similar to the debates conducted by the major social and economic stakeholders as they attempt to shape the future in their own sphere of activity according to their own world view. Seen in this way, a survey does not provide any predictions but serves to highlight conflicting views about the future.

In this article, we will first take a look at the main results obtained in the eight categories and conclude by addressing some of the broader aspects.

### Work

The future of work in Germany is a hotly debated issue, something that is borne out in the survey results. Expectations in terms of working hours and job security tend to be mainly negative. Only a small minority expect any relief on the work front, a shortening of working hours, etc.

A clear majority of almost three quarters assume that, by 2030, most employees will have a second job or another sideline in addition to their main job. And not because they want to but purely for financial reasons as the answers from the category entitled "Relationship between rich and poor" imply.

However, opinions are divided on whether working until the age of 75 will be the norm. In any case, almost half of respondents (49%) consider this extreme increase in the working life to be realistic. Similarly, almost half of those surveyed (48%) assume that, by 2030, most goods will be produced in developing countries. The

underlying contradiction between the outsourcing of production to the Third World and a longer working life here at home, does not seem to be expressed in the results. On average, people who are at the peak of their working life are slightly more pessimistic about the future. The expectation that second jobs will be the norm or that the working life will be extended significantly is more pronounced among this group. Among the employees who were surveyed, 78% expect that second jobs and other sidelines will be a normal part of working life by 2030. On the other hand, only a few respondents fear that the mergers and alliances that are currently taking place will lead to super monopolies. Only about 20% of respondents expect that, by 2030, the ten biggest European companies will employ more than half of the European workforce. Significantly more older people (28% of 60- to 69-year-olds) expect that this type of extreme monopolisation will occur.

The vast majority of respondents disagree with the more optimistic statements about the future of work. Only one in eight assumes that leisure time will be more important than a good salary in the future. This proposition, which has been put forward by many futurologists for decades, is therefore seen to have very little resonance among the population. Very few respondents (14%) have hopes of reduced working hours as a result of automation. In view of the fact that "global work", the globalisation of companies, greater interaction with other countries, etc., is increasingly under discussion, it seems almost disconcerting that only one in seven respondents expects that in future almost all employees will work at least once for a certain period of time abroad. Interestingly, the results in Baden-Württemberg are significantly higher (24%). This can be interpreted to mean that the very agile companies in the south of Germany, among them some "hidden champions", already have closer contact with other countries and the globalisation of work is understood clearly by the workforce in this region.

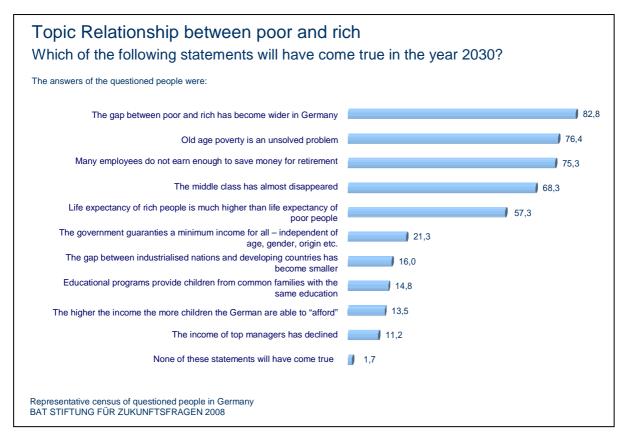
# Relationships between rich and poor

The questions regarding relationships between rich and poor are particularly revealing when it comes to the fears that Germans have about economic and social decline. More than three quarters of respondents expect that:

- the gap between rich and poor will widen even further,
- poverty among the elderly will be an unsolved problem in 2030,
- many employees will not be earning enough to put something by for their old age,
- everyday products, especially food, will be considerably more expensive.
- High energy prices are also seen as a social problem in this regard: 64% of those who were surveyed believe that rental costs that include heating, electricity and other service charges will be twice as high as rents that don't include these costs. Almost 70% assume that the middle class will have disappeared completely by 2030.

However, propositions that point to a reduction in social differences are rejected by a similarly high majority:

- Only one in nine respondents expects that incomes for top managers will fall.
- Only one in five expects that the government will guarantee a minimum wage for all irrespective of age, gender, background, etc. in 2030.
- Only one in six believes that the divide between industrialised and developing countries will be bridged.



It is hardly surprising that people who are dealing with a specific problem in their own lives will tend to have more extreme views. Take the example of poverty among the elderly. In this case, older people generally have a bleaker view of the future than younger people do. While 69% of 20- to 29-year-olds expect that poverty among the elderly will be an unresolved problem in 2030, 84% of 60- to 69-year-olds hold the same view. Similarly, the number of respondents who agree with the propositions that the gap between rich and poor is widening, that the middle class is disappearing or that people do not have enough income to put something by for their old age, correlates positively with age.

The expected growing social differences are sure to have an impact on a variety of areas. One hypothesis is that children are becoming a luxury that only people with a higher income can "afford". However, only 14% of respondents agree with this hypothesis, although, tellingly, the figure is significantly higher among students (22%). A clear majority of those surveyed, however, envisage serious consequences to the social divide: 57% assume that the life expectancy of better-off people in 2030 will be considerably higher than that of poorer citizens.

#### Education

Majority agreement was reached in the case of only one single statement in the education category: in 2030 more and more highly qualified women will be occupying leading management positions (60%). On the other hand, statements that specifically refer to a fundamental transformation of the German education system are rejected, in some cases, by an overwhelming majority. A majority believe that there is very little capacity for change in an education system that is deadlocked by federal bickering over responsibilities.

We could, however, also interpret this data the other way round: almost one third of those surveyed believe that there will probably be more private schools than state schools in Germany in 2030. This belief is held by almost half the respondents in the new federal states. The school system in the east of the country – not least because of the dramatic demographic trend there – is already exposed to a much greater dynamic than the states in the west.

The importance of electronic media is increasing but even in 2030 we will still be very far away from a complete virtualisation of education. Nevertheless, 40% of respondents expect that online lectures will be delivered simultaneously by the best professors from a variety of universities. Curiously enough, only today's students are more sceptical – 38% of them believe this will be the case. In contrast, this proposition meets with the approval of a majority (53%) of university graduates.

The increased demands of the working world are reflected in several propositions although not by a majority.

- A total of 41% of respondents consider it realistic that in 2030 talented children will be actively sought out as early as pre-school stage and have their talents systematically developed.
- Only one third assume that in 2030 employees will receive advanced training each year as a general rule.
- Only one quarter of respondents expect that in 2030 talent scouts will be seeking out up-and-coming talent, even in primary schools, for the major companies.

There is a striking difference in how university graduates and those with fewer formal qualifications view the future. While the latter are extremely sceptical when it comes to believing that the education system will change, many more academics, though not a majority, agree with the proposition.

### Security

Security is an issue that instils fear in the population. More than two thirds of respondents agree that organised crime will be a massive problem for Europe in 2030 and that Internet crime in particular will increase sharply. At the same time, roughly two thirds do not expect that better exchange of information within Europe or increased security-related surveillance (using computers) will make things safer. There is clearly a belief that the state will not be able to take control of the problem of criminality in the foreseeable future. Despite this, only a minority of just under one third assume that in 2030 people will consider security to be more important than protecting the private sphere. Fears about security are therefore not so pervasive as to undermine civil liberties. In line with this finding, opinion is completely divided as to whether tougher sentences will be handed down in future.

It is hardly surprising that slightly older citizens are more inclined than younger people to see organised crime as a huge problem in the future. Conversely, slightly more younger people believe that Internet crime is increasing. An above-average number of higher earners and individuals with a higher standard of education consider that both types of crime will constitute an acute problem in 2030.

## **Family**

Common ground is reached when it comes to the issue of changes in relationships with partners and families. According to the survey results, it seems that the

traditional marriage will be an outdated model by 2030. Approximately 70% of respondents agree with the statement that most couples will live together without a marriage certificate; in the new federal states this figure is over 80%. At the same time, more than half of respondents assume that same-sex couples will have practically the same legal status as those in heterosexual relationships: they will be able to marry and adopt children.

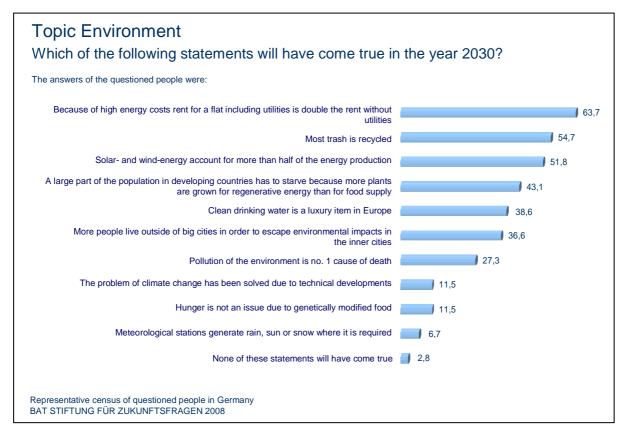
But how will we find partners? Internet dating sites and portals are currently booming. Yet respondents appear to be sceptical in this regard. Even the understated proposition that one third of all couples will meet over the Internet by 2030 is affirmed by only some 40% of respondents. However, this average value, taken across all age groups, is only meaningful to a certain extent. Among younger people, today's 14- to 19-year-olds, in other words the first "digital generation", a majority of 55% agree with this statement. Today's teenagers are already using the new medium to find a partner and will continue to do so at an even greater rate in the future.

All hopes for a significant resurgence in the birth rate are flatly rejected by respondents. Not even one in five believes that women will have an average of two children in 2030. To put this figure in perspective: women in Germany currently have an average of 1.3 children. The younger generation is again somewhat more optimistic in this regard: 27% of 14- to 19-year-olds and an almost greater proportion of students agree with this statement. Among teenagers aged between 14 and 17, the figure is as high as 34%. Their own desire for children and the family life that they envisage are clearly influencing their expectations here.

At the other end of life's journey is the issue of housing and care for the elderly. Almost half of all respondents believe that there will be more residential community housing for older people than for younger citizens. Almost the same number believes that in 2030 there will be day-care centres for older people similar to the day-care facilities that are available for children. More than 60% of 60- to 69-year-olds agree with this statement. One particularly specific group consists of men currently over the age of 80. In contrast to elderly women, a significantly above-average number of these men expect that day-care centres for the elderly (84% agreement) and residential communities for the elderly (70%) will be established.

### **Environment**

The current increases in oil, gas and petrol prices are clearly reflected in the statement that meets with the highest level of agreement: Almost two thirds of those surveyed fear that tenants will be paying the same amount for energy costs that they pay for rent. At the same time, a little more than half of them assume that in 2030, solar and wind energy will account for more than half of the energy produced. Young people are slightly more optimistic, while older people are more sceptical. We have already referred to the underlying contradiction between these two statements. The very high level of agreement with the proposition that our energy supply in 2030 will come predominantly from the wind and sun is worth noting as the formulation of this proposition extends far beyond the objectives of the federal government and could be seen as almost utopian – even if respondents are referring only to the generation of electricity and not to the issue of primary energy as a whole. Such high levels of agreement therefore reflect current debates and simplistic hopes for the future, often propagated by politicians.



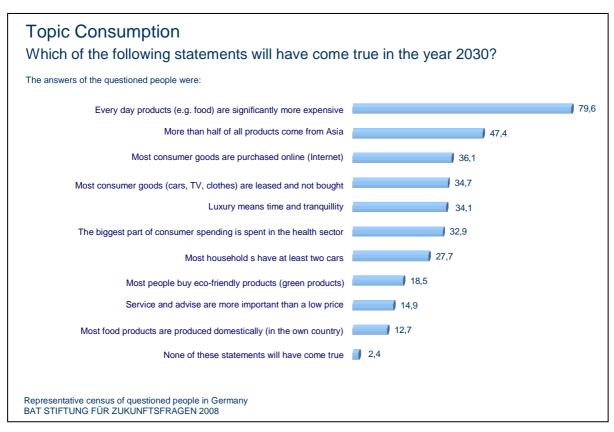
The result, which implies a technology-based solution to our energy problems, also contrasts very clearly with the scepticism of respondents when it comes to a technological solution to climate problems. Only 12% of those surveyed expect that we will have a solution by 2030. Expectations are also low with regard to resolving the problem of hunger with genetically modified food – this also meets with the approval of only 12%. A significant majority expects that wars will be fought over resources such as oil, gas or water. The old, almost clichéd vision of the future, in which the weather must be influenced in a particular way, is rejected almost unanimously.

Some answers also refer to the successes achieved by more than three decades of environmental policy. Only 27% of respondents fear that environmental pollution will be the main cause of death in 2030. A slight majority is of the view that most rubbish will be recycled in 2030, which by definition is already the case today (if we include "thermal disposal", in other words, burning rubbish). The view that water is becoming an increasingly valuable commodity has gradually embedded itself in the public consciousness, evident in the fact that almost 40% agree with the relevant proposition. All in all, expectations regarding the environment reflect very closely current debates on climate and energy and increased environmental awareness.

## Consumption

Consumer expectations are marked by fears of inflation. Four out of five respondents expect that everyday products will be considerably more expensive in 2030 than they are now. An even slightly higher proportion of respondents disagree strongly with the proposition that service and advice will be more important than a low cost. This also ties in with the assertion that environmentally friendly products will not be widespread in 2030. Only 19% of those surveyed expect that most people will turn

to "green" products and even fewer assume that most foodstuffs will be produced in their own country by 2030. This proportion of slightly less than 20% may correspond to the potential LOHAS market (those who adhere to a Lifestyle of Health and Sustainability). This grouping tends to be found, as suggested by the higher levels of agreement, among the more highly educated and higher earners. The gap between the high level of environmental awareness among Germans and a much less developed propensity to take action has been discussed in several studies on the subject. Respondents to this survey do not expect this divide to be bridged by 2030. In recent years, online shopping has increased considerably and this trend is set to continue. However, just under one third of respondents assume that most of our consumption will be conducted over the Internet in 2030. Once again, this average value is not particularly meaningful. Roughly half of today's 14- to 19-year-olds, the children of the digital age, rely on Internet purchases, while only a quarter of pensioners can imagine a "virtualisation" of purchasing behaviour. The middle-aged generation of 2030 will do much of its shopping online.



There is a similarly high or low level of agreement with the proposition that, in 2030, most products will be rented and not purchased. In the opinion of around one third of respondents – across all age groups and professions – the idea that usage will indeed be more important than ownership will catch on.

All in all, the results of the "Consumption" category are proof that a materialistic point of view will prevail: price will continue to be more important than service or environmental responsibility. And luxury will continue to mean "consuming a lot".

### Integration

Integration remains a problematic area. Less than one in five respondents expects that the integration of immigrants will be any easier in 2030 than it is today. More than half of those surveyed assume that, like today, most migrants will settle in specific residential areas and conflicts between certain immigrant groups will persist. In line with this assertion is the view expressed by respondents that marriage or other romantic relationships across ethnic or national boundaries will still be the exception to the rule. Even the understated proposition, suggesting one third of relationships in Europe will be multi-ethnic or multinational in 2030, is rejected by the majority of respondents. If we consider that in some of the larger German cities today, half of the young people come from immigrant families, this seems an overly conservative view and does not augur well for coexistence between the various population groups. But where will the immigrants come from? A slight majority of respondents assume that most migrants will come from other EU countries. Viewed in this light, it should not really be a major problem for most of them to integrate successfully. However, it is not EU citizens but migrants from other cultural spheres that are currently dominating the picture and according to the results of the survey will continue to do so in 2030.

One hopeful sign is that propositions that raise the issue of barriers are rejected by a majority of respondents. Despite all the discussions stirred up by the media regarding Islam and Islamism, only 31% of those surveyed assume that belief and religion will be an important factor in immigration policy. And only one in six believes that Europe should close its borders to non-European migrants.

## Technology: scepticism but not rejection

Some correlations only become apparent when we take a second look. If we place the results of the survey for the eight categories side by side, similarities and differences appear, for example in the area of technology. A deep scepticism about solutions that are purely technology-based is apparent in all categories. Only one in seven or one in eight respondents expects that:

- working hours will be shortened due to automation,
- technology-based solutions will be found for our climate problems and
- genetically modified plants will help to eliminate hunger in the world.

Less common is the scepticism about new, and sometimes controversial, applications of information and communication technologies. Thus, roughly only one in three respondents expect that portable devices such as mobile phones with simultaneous interpreting capabilities will make communication easier or that surveillance software will be able to catch criminals red-handed. And only one quarter of respondents agree with the propositions that in 2030, it will be possible to use IVF technology to select the sex, hair colour or size of a child or that people will wear chips that will facilitate identification and fix locations. Also, the clearly negative proposition that in 2030 bio- or nanotechnologies will prove to be very risky is accepted by only one in four of those surveyed.

To sum up: while there is a certain amount of scepticism surrounding new technologies, the frequently made claim that Germans are afraid of such technologies is not evident in the results of this survey.

## Striking regional differences

Almost 20 years after reunification, there are still considerable differences between the old and new states when it comes to expectations about the future. In the eastern states, for example, there is greater openness to new education models, marriage is considered to be more of an outdated model than it is in the west of the country and there is generally a significantly more pessimistic outlook with regard to social issues, depending on the situation in the specific region. Thus, 65% of citizens in Saxony-Anhalt expect that most employees will have to work until the age of 75; in contrast, only 35% of people in Schleswig-Holstein hold this view.

It is interesting, however, that there is also a north-south divide and marked differences within the old federal states. When it comes to work and social issues, security issues and even demography, Baden-Württemberg appears to be the land of optimists with considerably higher agreement levels with positive statements and significantly lower agreement levels with negative statements. Conversely, citizens in the city state of Hamburg are more pessimistic than the average German about the future. It is only when it comes to issues of integration that Hamburg residents are more optimistic.

### Bleak outlook on the social front

If we look at all the statements in the "Work" and "Relationship between rich and poor" categories, the result is a distinctly negative picture, almost verging on a horror scenario. It is a view shared by roughly three quarters of the population. An overwhelming majority expect that social decline, poverty among the elderly and exploding food and energy costs will shape our lives in 2030. The rich will get richer, the poor will get poorer and the state will not do anything worth mentioning to counteract this trend, such as setting a minimum wage or curtailing salaries among the elite. Given these conditions, second jobs and other sidelines will be the norm, yet many people will not earn enough to put by a nest egg for their old age or be able to afford good health insurance. Many people, especially the middle-aged, picture themselves having to work right into old age and certainly beyond the current retirement age.

One feature of these results is that all social classes are affected by these fears about the future of society, and education, income, family status and other characteristics play only a small role: pessimism is rampant throughout society. It is only among young people that this bleak feeling about the future is slightly less prevalent.

# One ray of hope: the young digital Europeans

In another 20 years, today's youth and young adults will be in the middle of their lives and as a generation will – hopefully – be calling the shots. For this reason alone, therefore, it is worth taking a more in-depth look at their expectations for the future. As mentioned above, the young generation is slightly less pessimistic than older people about social problems. However, the majority of them do not share a positive outlook. For example, 63% of today's 20- to 29-year-olds agree with the proposition that the middle class will have disappeared by 2030; this figure is 68% among the population as a whole. Given the power that older people have to influence opinion

by determining socio-political discourse in the media and within the family, this is a very noticeable difference.

Similar differences arise in the areas of work and education. While slightly less than half the total population expects that most Europeans will speak two languages by 2030, more than half of young people aged between 20 and 29 believe this will be the case. The same applies to the proposition that in 2030, one quarter of all young employees will be working in jobs that do not yet exist. The same pattern is repeated in all questions relating to the new digital media. Irrespective of whether the subject is online lectures, Internet shopping or online dating sites, a higher than average number of young adults are in agreement with the relevant statements. This more positive attitude is also reflected in the questions on multi-ethnic relationships, women in higher-ranking positions and easier integration of migrants.

In short, young people expect a different, slightly better, slightly more digitalised, slightly more European, slightly more open future than older people do.

We can only speculate about causes and effects here. We could see the reason for the differences in a more or less biologically determined youthful optimism, which will wane over the years. We can also hope, however, that the generation that has grown up with digital media, an almost borderless Europe and with migrants of the same age, will develop a more optimistic view of the future than that pictured by their parents' generation.

# A provisional summary

The survey provides us with a detailed but very fragmented and in some cases contradictory picture. On the whole, questioning expectations about the future confirms numerous findings from surveys on current attitudes and opinions, such as the fear of social decline, scepticism regarding technology-based solutions or the differences in mentality between the old and new federal states.

The majority of people are looking to the future with, in a best case scenario, mixed feelings. The Federal Republic of Germany is a wealthy country with a well-established social security system and a high level of prosperity. Yet – against a background of demographic change and globalisation – many people fear a major change for the worse. The survey clearly shows how strong the undertow of negative expectations is. If we had asked futurologists the same questions, we would probably have got very different results on a number of issues.

The future is open, it has not yet been written. Scepticism against an excess of optimism but also against too much gloom, is therefore judicious. Most importantly, debates about the future need to be more realistic. We would hope that the survey would trigger an intensive debate in the public sphere about current challenges, future problems and potential solutions that extends beyond tearful sentimentality and calculated euphoria. In the long term, we could hope that a European future barometer, along the lines of the Eurobarometer, could be developed based on the survey, allowing us to identify trends in expectations.

**Italy: ITALY 2030** Riccardo Cinquegrani

#### Introduction

The paper analyses a sort of "picture" of what Italy will probably be in 2030. Eight specific topics are used in order to define some characteristics of future Italian society. These aspects highlight crucial questions and this essay tries to introduce some answers. The topics considered are:

- ✓ Work;
- ☑ Relationship between poor and rich;
- ☑ Education;
- ☑ Security;
- ☑ Family;
- ☑ Environment;
- ☑ Consumption;
- ✓ Integration.

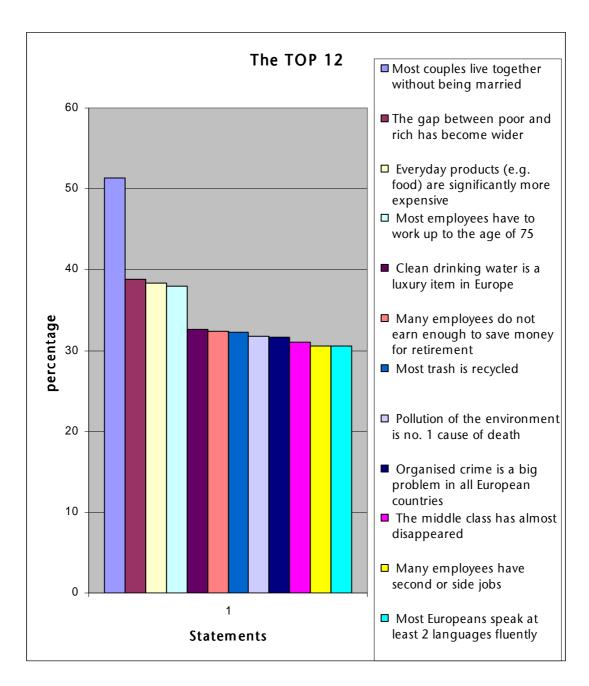
In general, the above mentioned terms express wide and complex contents and concepts (e.g. integration also considers aspects related to the future of EU and foreign policy, work takes into account the role of robotics and automation in our daily life; and relationship between poor and rich together with family also analyse problems related to the so called aging society). It is worth underlining that although this study tends to cover a huge amount of societal drivers, some major aspects, such as the role of research policy, the growing importance of ICT in delivering information, the increasing relevance of biotechnology, the use of new materials in production (e.g., viruses in textile sector, the use of aeronautic extra light components in automobile industries)<sup>26</sup>, are not expressly indicated in the statements proposed to the people interviewed. Consequently, it is likely that the proposed terms and related statements are not recognised as exhaustive in determining the vision of Italian society in 2030 by a part of the representative sample.

# The whole picture

A useful way to describe the results obtained is to define the "Top 12" set as the group of the twelve most important statements indicated by the interviewees irrespective of the related topic<sup>27</sup>. In Figure 1 these statements are reported, ranked by the percentage of affirmative answers.

<sup>&</sup>lt;sup>26</sup> Antonio De Nardo, "*Il lampione*", report of the seminar "The research and innovation day" held in Rome on the 6 march 2008, Notiziario dell'Ordine degli Ingegneri di Roma, Rome, June 2008.

<sup>&</sup>lt;sup>27</sup> The list consider all the statements which receive an answer rate > of the 30%.



The graph clearly highlights two things: a) we can subdivide the *top 12* set into three groups according to the different percentage values and b) one statement - *in Italy, in 2030 most couples will live together without being married* - seems to be significantly more probable than the others.

The latter finding doesn't seem to be a revolutionary image of the future since already now a considerable percentage of couples match this "status" . However, we should consider at least two aspects: firstly, in Italy the law which allowed legal separation and divorce was approved in 1974 after a referendum which, at that time, divided public opinion into two factions; secondly, a shared cultural value has been traditionally attributed to the "conventional family", which has long been deemed the basic core structure of our society. Therefore, if we read the afore mentioned

<sup>&</sup>lt;sup>28</sup> Di Giulio P, Rosina A., "Intergenerational family ties and the diffusion of cohabitation in Italy", Demographic research, Volume 16article 14, pages 441-468, online published 25<sup>th</sup> May 2007.

data taking into account these two extra pieces of information we can assume that Italian society is moving towards another model in which the family is no longer exclusively built on marriage<sup>29</sup>.

Going back to the top 12 list, more specifically the statements and the suggested groups are:

1) HONEYMOON

Most couples live together without being married (51%)

2) MONEY IS TOO TIGHT TO MENTION

The gap between poor and rich has become wider (39%)

Everyday products (e.g. food) are significantly more expensive (38%)

Most employees have to work up to the age of 75 (38%)

3) TURBULENCE FEARS AND HOPES

Clean drinking water is a luxury item in Europe (33%)

Many employees do not earn enough to save money for retirement (32%)

Most trash is recycled (32%)

Pollution of the environment is no. 1 cause of death (32%)

Organised crime is a big problem in all European countries (32%)

The middle class has almost disappeared (31%)

Many employees have second or side jobs (31%)

Most Europeans speak at least 2 languages fluently (31%)

The first group (made up of a single statement) although related to an extremely personal sphere nevertheless identifies a path which sounds a signal of change in Italian society and life styles. Its importance seems to be underlined by the percentage of answers (considerably higher than the others) and the deep implications and consequences that this aspect shows for the future of Italian society. Two key features characterize the specificity of Italy: strong ties between parents and children and a welfare state that provides very limited direct help to youth. It is exactly these features that are the basis of the relatively scarce diffusion of non-marital cohabitation in Italy<sup>30</sup>. Considering the low probability of an improvement of welfare state measures for young couples, change will derive from a reformulation of roles and relationships inside families.

The second group (around 38%) has been named "Money is too tight to mention" (which was the title of an ironic and at the same time bitter song sung by an English pop group during the eighties), because all the three statements are significantly related to the need to earn money especially for older people.

In particular, "Everyday products (e.g. food) are significantly more expensive" and "Most employees have to work up to the age of 75" seem to be self explanatory: the causes may be unclear or fully understood but anyway the interviewees have the feeling that life, especially after 75, will become very difficult. Satisfying primary needs will be an everyday problem. This will be true for a huge part of society but not for all because "The gap between poor and rich will become wider".

This phenomena also recalls the fact that the structure of our society is changing basically from a demographic point of view. The concept of an ageing society reflects "a trend in society of longer life expectancy and a birth-rate falling or remaining low, leading to a change in the composition of the population, with an increasing number of older persons relative to both the number of children and young people

<sup>&</sup>lt;sup>29</sup> Ibidem.

<sup>30</sup> Ibidem.

and the number of people of working age"<sup>31</sup>. It has to be underlined that the theme concerning which type of welfare state model should be implemented together with a media campaign on possible pensions' system reform is a debate which has been going on for ten years in Italy and will probably continue for the next 20. To a certain degree, it is possible to consider the answers included within this group as the result of a "collective forecast" provided that more than one third of the interviewees think that if present trends go on for the next twenty years the sustainability and the quality of life will be threatened because of uncertainties related to specific goods (especially food) and welfare services (particularly healthcare services) and their availability.

The third group is more heterogeneous: eight statements with a percentage spread of less than 2 points imply a strong concentration of concepts with different meanings. In this context it is useful to build clusters and sub groups:

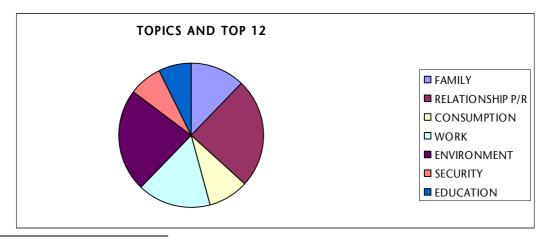
☑ Turbulence and fears: Clean drinking water is a luxury item in Europe, Many employees do not earn enough to save money for retirement, Pollution of the environment is no. 1 cause of death, organised crime is a big problem in all European countries, the middle class has almost disappeared.

The idea which emerges from these sentences could be simply classified as the expression of a collective pessimistic attitude; however, paying more attention to the data we should consider that these five sentences were used to describe four different topics (relation between poor and rich, work, environment and security); it is not simply "fear", or a "multi-level unease", this seems rather to be a societal shock.

☐ Hopes: Most trash is recycled, many employees have second or side jobs, Most Europeans speak at least 2 languages fluently.

We could assume that Italy in 2030 will be characterised by technological efficiency (related to trash recycling), and social turbulence (e.g., according to the above people will have a second job because of necessity rather than by choice). The hopes that Italians have for the future are linked to the following bottleneck: the search for sustainable models of economic growth, the implementation of measures aimed at fostering social cohesion and the exchange of practices through inter cultural dialogue (in this sense the possibility that most EU citizens will speak two languages fluently seems to be extremely coherent).

If we analyse the list of the "Top 12" statements starting from the suggested topic, it is possible to identify a sort of order of priority.



The Danish Council for Strategic Research, "The aging society 2030", Report by the Steering Group for the strategic

foresight on the ageing society 2030, Copenhagen, Denmark, 2006.

Relationship between poor and rich and environment are the two most frequently answered topics among the first 12 statements. Conversely, "education" (12<sup>th</sup>) and "integration" are marginally considered in order to describe Italian society in 2030. The latter topic is even out of the top 12 list given that the highest number of recorded answers, which related to the statement "In Europe one third of partnership/marriages are multinational/multicultural", reached only 26.9%. Curiously, such an issue relates to the theme of family and marriage which is at the top of the list though in relation to a different topic. In synthesis the whole picture seems to be a Caravaggio painting characterised by chiaro/scuri that is the light of hope and the darkness of somewhat justified rational fears (Karamessini, 2008)<sup>32</sup>.

# The topic in detail: Work

As Emile Durkheim said, time is a social construct that reflects the rhythm of collective life. Time is not a constant flow: hours, days and weeks vary from one person to another and, from a statistical viewpoint, time varies from one social group to another according to their gender, age, employment condition, presence of children and age, etc. Watches and calendars have been orienting individuals since the phenomenon of urbanism and since the establishment of life in cities in the XIV century, and subsequently since the introduction of the working day in specific places (factories, offices etcetera) with the industrial revolution; therefore, not essentially in the atmospheric, religious, and weather events, but rather in the planning of social life, in the collective rhythm influenced by the social and labour organisation and by the institutions in which individuals live (Sorokin and Berger, 1939)<sup>33</sup>. Usually, time represents the main factor for measuring the value of work. However, in recent years and probably even more in the near future salaries will be more related to the quality of the result or the success of a specific task/project rather than to an amount of work measured in time. This type of shift could be one of the possible explanations why 15% of interviewees answered "None of the [proposed] statements will have come true. According to the survey the Italian labour market in 2030 will be characterised by the following aspects:

✓ Most employees have to work up to the age of 75 (38%);

 $\square$  Many employees have second or side jobs (31%);

☑ Production of goods takes mainly place in developing countries (24%);

In particular, the North-West of the country is firmly convinced of that (five to nine points more than the national average for the three statements), cities with more than 100.000 inhabitants seem to consider globalisation as an effect which will lead to the production of goods mainly in developing countries and people with a low level of education and a net income up to 1050 Euro consider less probable than others the fact that employees have to work up to the age of 75 (30 and 17, respectively, whereas the national average is 38%). About one fifth of the youngest (14-34 years) is convinced that "because of automation most people will work less than 25 hours a week", and more than 20% of the oldest (over 80) think that "many employees will have a second or side job". The life cycle seems to be "neutral" with

<sup>&</sup>lt;sup>32</sup> Karamessini M., "Continuity and change in European Social model", International Labour review, Vol 147 (2008), N. 1, pages 43-70.

<sup>&</sup>lt;sup>33</sup> ISTAT, Istituto Nazionale di Statistica, "*Time use in daily life"*, Argomenti nr. 35/2008, Roma, Giugno 2008.

respect to the three statements. Finally, it is noteworthy that zero males over 55 consider "leisure time more important for employees than a good salary" Is that a cultural attitude or another sign of the previously mentioned fears for the future?

## The topic in detail: Relationship between poor and rich

Two interrelated aspects emerge from this topic: disorientation and development of a "widespread egoism". Historically, Italy has been a nation based on the middle class, but for 31% of interviewees this part of society will disappear by 2030, the logical question which follows this consideration is "what will happen to these people?" According to the data, most of them will become poor. Moreover, as said by 39% of the respondents "The gap between poor and rich will become wider in Italy"; this is particularly true for the 44% of people between 40 and 49 years of age and for the 41% of people between 50 and 59 years of age. In 2030 they will be 62-81 years old. If we also consider that 32% of the interviewees believe that "many employees will not earn enough to save money for retirement" the meaning of this data becomes clear: old people will be the so called "new poor class". The disorientation is also related to two other structural aspects of Italian society: the "family network", in which parents and sometimes grandparents (thanks to their pensions) are able to help the youngest generation and the development model followed after the second world war based on a simple assumption: "my children will upgrade their societal status and their children will do the same". This perspective implies a never ending development path with a decreasing marginal upgrade. The result is the creation and the empowerment of a wide middle class. The fact that "old age poverty will be an unsolved problem" (29%), is also related to the second mentioned aspect: the consolidation of fatalistic behaviour. This emerges from the low importance given to the statement "the gap between industrialised nations and developing countries has become smaller" (13%) and from the 8% positive answer given to "the government guaranties a minimum income for all - independent of age, gender, origin" and the 8% attributed to "Educational programmes provide children from common families with the same educational opportunities as children from academic families". In other words, the future seems to be simply something which will happen. These three statements (which could be considered a stimulus to foster social cohesion) are not trusted. In a democracy citizens vote and choose public policy and strategy. The time for action is the present but Italians seem to lack any weapon in this battle: they must just wait for things to happen while they become older.

This picture seems to be more appropriate for people living in big cities (more than 100,000 inhabitants), than for those living in small villages (up to 5000 inhabit.). It is not an issue related to optimism versus pessimism or industrialisation versus living in a more "human dimension", it is only a matter of a more radicalised and structured social model: often in small villages most families have close relationships and the solidarity network is still considered a natural duty.

In synthesis the key factor is the perception of what poverty is and the solidity of cultural milestones in our social model: this assumption is supported by answering some questions based on data such as:

☑ Why do only 20% of people earning up to 1050 Euro (against 37% of people earning up to 2401 Euro) think that "many employees will not earn enough to save money for retirement"?

☑ Why do only 24% of people earning up to 1050 Euro (against 48% of people earning up to 2401 Euro) think that "the gap between poor and rich will become wider in Italy"?

☑ Why do only 24 of people earning up to 1050 Euro (against 40% of people earning up to 2401 Euro) think that "old age poverty will be an unsolved problem"?

Why do only 4% of people earning up to 2401 Euro (against 20% of people earning up to 1050 Euro) think that "none of these statements will come true"? A possible answer is the misperception of reality of a part of the middle class. They already feel poor! As a consequence, their vision is the opposite of their parents' one; there is a sort of shift of paradigm: the future will be not better anymore for future generations.

### The topic in detail: Education

Generally speaking, "education" is considered one of the most fruitful forms of investment for the future. At macro level every single country or region which desires to improve its condition builds schools, trains teachers and defines programs for universities. The role of education is basically linked to knowledge and this item is particularly important for Europe. "The need to improve transparency of European labour markets, increase the skill levels of populations and prevent skill mismatches, make information about the future development of skills and competences indispensable. Relevant findings could help to achieve the objectives set in European employment and lifelong learning strategies and are essential for developing a European knowledge-based society. New and changing skill needs are challenges for policy-making to achieve wider social and economic objectives of cohesion and competitiveness in the European Union"<sup>34</sup>.

Italy seems to be rather uninterested in investing in education. If we recall the "Top 12" introduced in the first part of this paper, there was only one statement belonging to this topic *most Europeans speak at least two languages fluently*, and it was in the last position: ". This situation seems to be coherent with what has been said: there is a lack of interest in investing in the future; there is no trust in the potentiality offered by e-learning (only 18% of interviewees consider true the statement "Online-lectures are given simultaneously by the best professors at different universities"); there is no consensus on the possibility of democratising knowledge by using media (only 13% agreed on "Media are responsible for 1/3 of education and broadcast special educational programs for this purpose"); it is not considered probable that tactics and instruments used in other fields or sectors (such as sports) will also be used in education (8 and 12% thinks respectively that Talent scouts look for new recruits for big companies already in elementary schools and A system to detect special abilities develops many children, starting already in kindergarten).

These considerations are supported by other two significant data: 17% of the respondents argue that *None of these statements will have come true*, and it seems that employed women do not believe in the possibility that *More and more highly qualified women assume leading management jobs*. In particular, while women over

<sup>&</sup>lt;sup>34</sup> CEDEFOP (The European Centre for the Development of Vocational Training), "Future skill needs in Europe, medium term forecast", Luxemburg 2008, page 1.

55 are fairly convinced that a process of empowerment will increase the presence of women in top positions (56%), the percentage significantly decreases with the class of age of the respondent (36% for 35-54 year-old women and 21% for the 14-34 year-old employed female). Education, low trust in ICT potentiality, the role of women in society, inability to recognise the possible future in at least one of the suggested statements, all these aspects describe a set of alarmingly weak signals in which the problem is not only the future but also the present. There is no clearly laid out development path; education is no longer a point of strength for an aging society involved in managing present emergencies rather than planning future possibilities. What will the future of this society be in the arena of globalisation? How will Italy compete with other countries and social systems? If we compare Italy with Australia and we take 2030 as temporal horizon, some hints can be derived from scientific publications in answer to these questions: "by 2030, climate change is likely to have implications for the Australian wool industry, principally through effects on forage and water resources, land carrying capacity and sustainability, animal health, and competition with other sectors, in particular cropping. The nature and scale of these impacts will vary between the wool growing regions, depending on the manifestation of the climate change" 35. Probably, by 2030, Australian education system together with appropriate research policies will explore possible solutions while Italy will (still) be trying to manage structural emergences such as pensions and welfare state model.

# The topic in detail: Security

The security of our society in 2030 is almost based on a theory of "global" or regional security. In fact, the two most quoted statements are "Organised crime is a big problem in all European countries" (31.7%) and "Warlike conflicts about natural resources like oil, gas or water take place" (28%). Italy being a country with endemic problems related to organised crime, it also has to be underlined that a sense of responsibility emerges from the first answer: this statement was considered true both in northern Italy (32%) and in the south of Italy (31%). Young people, especially those from 14 to 19 years of age (38%), are convinced that turbulence and conflicts in international relationships will be caused by the need for natural resources. On the other hand, people who are over 70 seem to be particularly worried about the link between immigration and criminality; in fact 25% of them consider true that The crime rate of foreigners / immigrants doubles the crime rate of natives. This idea is shared by 32% of people living in big cities (with more than 100000 inhabitants) where security is more important than privacy (28%). Also 31% of the sample agree on the fact that penalties for criminal acts will become higher. Once again (as for the topic related to the differences between poor and rich), Italy is divided into two different sectors: it is no longer a north-south disparity but a "village-metropolis" contrast. In fact, only 15% of people living in small villages (up to 5000 inhabitants) consider security more important than privacy (they feel safe and they do not image that this condition will change ) and, consequently, they do not envisage that

<sup>&</sup>lt;sup>35</sup> Harle K.J., S.M. Howden, L.P. Hunt, M. Dunlop, "The potential impact of climate change on the Australian wool industry by 2030", Agricultural Systems 93 (2007) 61–89.

penalties will increase (only 16%). Also immigrants are not considered a threat as in big cities probably because of a different scheme of social relationships based on personal knowledge of people. For the topic "education", as for "security" there is not much trust in the use of ICT: only 12% of respondents think that "European / international data transfer helps to solve crime faster, people feel more secure than today", and almost 20% consider that "Internet related crime has increased very much". In synthesis in 2030 organised crime will develop an articulated system of power able to use Internet and other technological solutions to its own advantage in order to permeate the whole continent with its business. In this battle, civil society will not have many weapons, even though it should be noted that 49% of over 55-year-old employed women are convinced that it will be possible to combat it through the use of surveillance computers able to identify many criminals directly when committing a crime.

# The topic in detail: Family

According to the data, in Italy, in 2030, most couples will live together without being married, a generation will be contemporarily financially responsible for their parents and their children, same gender couples will be allowed to adopt children and there will be a considerable increment of social services for senior citizens (because of the aging society more and more day care centres like day-care facilities for children will open). This situation would lead to the end of the conventional family and it appears unsustainable basically for one reason: it is most improbable that the welfare state will deliver all these services for old people. This could also be the explanation of a particular piece of data: 16.9% of people over 70 years of age consider that "none of the statements will have come true". This is probably because they know better than anyone else what "being a member" of the aging society implies. The data reveals once again a divergence between villages and big cities (in four statements they differ by more than 12 percentage points), and this time in addition a contrast between the north-west and the south of the country comes out. Both, the marital status of the respondent and the monthly household net-income seem to be minor factors. Also, the different level of education doesn't seem to much affect the answer of the representative sample to several statements

	% Total	_	% University degree
Sex, hair colour and size of children can be selected in case of artificial insemination		13.3	15.4
Most couples live together without being married	51.4	41.8	42.4
Because of the large number of older citizens and the consideration of younger people's interests at the same time the votes of citizens under the age of 50 count double in elections	5.3	4.6	3.2
Same-gender couples are allowed to get married and to adopt children	22.7	19.1	19.2
Every third partnership/ cohabitation/marriage results from internet-dating-networks		15.8	13.8
The compatibility of work and family (work-life-balance) is possible for many women	14.3	12.3	13.5

The Italian family in 2030 will be different from the one we experience now, it will be more "open" and less traditional but it has to be remembered that in Italy family is not only considered as a social body, it is a cultural value. Probably, for these reasons the hidden message which emerges through the more than 11% of respondents who answered "none of the statement will come true" is that we will live two decades of turbulence during which family will have to support institutions in delivering social services whenever possible. But will it be sustainable?

## Three topics in brief: Environment, Consumption and Integration

Due to globalisation and other factors, such as the necessity of implementing international policies in order to define common strategies for environmental protection or for the exchange of products, goods and services, it is possible to trace a particular interrelation between the topics of environment, consumption and integration. A joint analysis of these three topics is to be preferred since it is impossible or at least less profitable for the single states to adopt measures in these fields without any form of cooperation with other EU nations. Once given this explanation, it is possible to argue that the perception of Italians about the future of the environment is quite negative. Clean drinking water is a luxury item in Europe, (33%), most trash is recycled (32%) and Pollution of the environment is the no. 1 cause of death (32%) is the three more relevant statements. Two of them could be used in describing a negative scenario, in particular the correlation between increasing cases of particular illnesses related to specific environmental situations seems to be scientifically proved. "The International Agency for Research on Cancer (IARC) is predicting an explosion of cancer. A statement released on World Cancer Day (4th February, 2008) predicted: 'By 2030, it could be expected that there will be 20 to 25 million incident cases of cancer, and 13 to 16 million cancer deaths annually. This is compared to various estimates that suggest that in 2000, there were 10.4 million new cases of cancer diagnosed worldwide and 6.5 million deaths from cancer"<sup>36</sup>.

Environmental policy making is usually informed by long term forecasts. These forecasts will also be based on the best possible estimates of future social, economic and technological trends. Sensitivity analysis is sometimes carried out to test the implications of variations in these trends. If, however, the future turns out to be completely different to the one envisaged the adopted environmental policies are unlikely to serve well. This sense of disorientation (as previously said) emerges too from the data referring to the topic consumption where the two most agreed statements were everyday products are significantly more expensive (38%) and most households have at least two cars (26%). The latter statement is particularly crucial if read together with the data related to the environment: "transport is a major user of carbon-based fuels, and achievement of the targets set at the Kyoto Protocol and elsewhere means that the EU and national governments must reduce CO2 emissions in all sectors, including transport". Although 2030 seems a long way ahead, action must be taken now if the targets for CO2 reduction are to be met. The achievement of a carbon-efficient transport future, combined with holding travel levels at present levels, is likely to be very difficult. A major transformation in the means of transport and urban planning is required"<sup>37</sup>.

In order to achieve this objective, it will also be necessary to harmonise different national policies; this process requires deep forms of integration. In this respect, it has to be underlined that none of the statements within this topic reach 30% of the answers and, for this reason, none of these issues are indicated in the top 12 list. Despite this, Italians are convinced that one third of partnerships/cohabitations/ marriages are multinational/multicultural (27%), and this data also implies that fifty years after mass migration began in most European countries, the process of integration has entered a new phase. Since the end of the 1970s in the north of Europe and of the 1980s in the south, all the major European countries have become countries of immigration and must build policies to promote the integration of their immigrants. After a decade of debate and studies we know a little more about the slow progress towards the social integration of different immigrant groups. However, as soon as we began to analyse the changes that have occurred in the sociodemography and economic position of immigrants, a new issue emerged on the social and political agenda: the 'management of diversity'. The rise of a 'second generation', i.e. the offspring of immigrants, in the former countries of immigration has produced a new context that needs to be further analysed. In order to improve our understanding of integration in the long run, the social sciences, demography in particular, should promote observations and analyses of the socio-economic positions and trajectories of this second generation. What kinds of integration are the second generations experiencing compared with their parents and with the natives of the countries where they live? Are they reproducing the positions, practices and trajectories of their parents or are they converging with 'native nationals' of the same age groups according to the theory of integration?

<sup>&</sup>lt;sup>36</sup> IARC Annual World Cancer data, quoted in News, European Journal of Cancer 44 (2008), pages 631 – 635.

Hickman R., D. Baniste, "Looking over the horizon: Transport and reduced CO2 emissions in the UK by 2030", Transport Policy 14, (2007), pages 377-387.

In 2030 will Italian society be characterised by *conflicts between single groups* because of cultural diversity (22.3%) or will it be a melting pot of races, culture and religious believes?

### Some conclusive remarks

"Between now and 2030, the older population will increase sharply throughout Europe. And as far as we know, the risk of physical and psychological impairment increases with advancing age, often making day-to-day care indispensable. So as the European population ages, we may expect a major increase in care demand. However, this demand closely depends on the type of household in which the older person is living and more broadly on their marital and family environment.

Partner and family are the primary carers in the event of disability (Chappell 1991; Walker et al. 1993). Changes in the living arrangements of older people therefore have strong policy implications, because they change the balance between formal and informal care. But equally important are their consequences for individual wellbeing"<sup>38</sup>.

The study clearly demonstrates that aging society is the central point of the future of Italy by 2030: it will be necessary to redesign our social architecture based on solidarity values coming from family networks, the welfare state system will be shocked by pension and health care expenditure and there will not be significant development of technologies able to contrast and solve problems related to the environment or security. Although in 2030 it will be necessary to have a stable international relations system, nevertheless supra national bodies, policies or strategies are seen more as threats rather than opportunities. Education is no longer an investment for the future, knowledge society seems to be an imposed project which is doomed to fail. The picture is composed of turbulence and fears: first of all poverty, lack of natural resources and in some cases immigration. In all the topics more than 10% of the respondents answered that none of the statements will come true, they are the people of the "missing statements", probably, in some ways, the hidden representatives of hope in a frame of social cohesion.

#### References

Neierences

- Barbieri Masini E., Why Futures studies?, Grey Seal, London 1994.

- CEDEFOP (The European Centre for the Development of Vocational Training), "Future skill needs in Europe, medium term forecast", Luxemburg 2008, page 1.
- Durkheim, Émile. Les formes élémentaires de la vie religieuse. Paris: Puf, 1991.
- Di Giulio P., Rosina A., 2007. *Intergenerational family ties and the diffusion of cohabitation in Italy*, Demographic research, volume 16, article 14, pages 441-468
- Dror Y., *The Capacity to Govern, a Report to the Club of Rome*, Frank Cass Publisher, Londra 2001.
- ENEA Ente Nazionale Energia e Ambiente, *Rapporto Energia e Ambiente 2007, Analisi e Scenari,* Roma, luglio 2008.

<sup>38</sup> Gaymu J., Ekamper P., Beets G., "Future trends in health and marital status: effects on the structure of living arrangements of older Europeans in 2030", European Journal of Ageing (2008), 5:5-17.

- Galasso V. and Profeta P., 2004. *Lessons for an ageing society: the political sustainability of social security systems*, Economic Policy, April 2004 pp. 63–115.
- Gaymu J., Ekamper P., Beets G., *Future trends in health and marital status: effects on the structure of living arrangements of older Europeans in 2030*, European Journal of Ageing (2008), 5:5-17.
- Harle K.J., S.M. Howden, L.P. Hunt, M. Dunlop, *The potential impact of climate change on the Australian wool industry by 2030*, Agricultural Systems 93 (2007) 61–89.
- Hickman R., D. Baniste, Looking over the horizon: Transport and reduced CO2 emissions in the UK by 2030, Transport Policy 14, (2007), pages 377-387.
- IARC *Annual World Cancer data*, quoted in News, European Journal of Cancer 44 (2008), pages 631 635.
- ISTAT, Istituto Nazionale di Statistica, "*Time use in daily life*", Argomenti nr. 35/2008, Roma, Giugno 2008.
- Karamessini Maria, 2008. *Continuity and change in the southern European social model.* International Labour Review, Vol. 147, No. 1
- Lazaridis, G.. *Southern European welfare states: Problems, challenges and prospects.* Basingstoke, Hants., Palgrave Macmillan2002.
- Sorokin, P.A., and C.Q. Berger. *Time budget of human behaviour*. Cambridge: Harvard University Press, 1939.
- The Danish Council for Strategic Research, *The aging society 2030*, Report by the Steering Group for the strategic foresight on the ageing society 2030, Copenhagen, Denmark, 2006.
- WHO *The European Health Report 2005*. Geneva.2005
- Zito Antony R., *Epistemic Communities, collective entrepreneurship and European Integration*, Journal of Euroean Public Policy 8:4, August 2001.

Russia: RUSSIA 2030 Alexander Sokolov

### Introduction: recent trends and current positions of Russia

After the disintegration of the Soviet Union and the deep economic crisis of 1990s, Russia implemented complex economic and institutional reforms that dramatically transformed the whole structure of the economy and society. Foreign visitors who have an opportunity to come again in 5–10 years will see tremendous changes.

Russia has a status as a market economy and has an international credit rating. A number of main socio-economic indicators reflect the positive changes. The annual GDP has grown by approximately 7% in the years from 2002 to 2007. The national economy has opened up to the outside world: foreign trade constitutes 45% of GDP, which is one of the highest figures for developed countries (although this is, to a large extent, related to the export of fuel and mineral resources). In 2008, Russia became the sixth economy in the world in terms of volume of GDP (measured in purchasing power parity) and exceeded the pre-crisis level of 1991 by 10%. The structure of the national economy is becoming closer to the market needs. National macroeconomic stability is provided by international reserves exceeding USD 600 billion (as of mid-2008).

More Russian companies are becoming competitive both domestically and internationally; the cost of Russian companies in 2007 exceeded 100% of GDP. The Russian stock market is becoming an efficient instrument for involving investment, e.g. from the population, and for boosting economic growth. The standard of living of the population is approaching that in developed countries, although it is still very uneven.

### Future prospects: a glance from inside

According to the Concept of Long-term Social and Economic Development<sup>39</sup> issued by the Russian Ministry of the Economy and widely discussed, the country will be faced with a number of challenges in the coming 10–15 years. The first of these is related to increasing global competition covering not only traditional markets of goods and capital but also governance systems and human resources. Another challenge is the forthcoming technology revolution and the increasing role of innovation, and especially the human factor at the expense of traditional factors of economic growth. Diminishing natural resources and increasing costs of labour, energy and fuel will make further extensive development impossible. This will be the right time for innovation, intensive use of qualified human resources and S&T capacities.

To overcome the barriers to intensive developments, it is necessary to resolve a number of macroeconomic, institutional and social problems, including the high inflation rate, social inequality, corruption and crime, poor organisation of business and corporate culture, insecure property rights, weak networks between businesses, science and education, and low competitiveness.

<sup>&</sup>lt;sup>39</sup> http://www.economy.gov.ru/wps/wcm/myconnect/economylib/mert/welcome/pressservice/eventschronicle/doc1217949648141

These and many other issues can be observed when studying the results of the Europe 2030 survey.

# Insight into the results of the Europe 2030 survey

#### Work

The demise of the Soviet Union and the transition to a market economy dramatically changed the attitude to work in Russia. On the one hand, bans on entrepreneurial activities were lifted and most enterprises were privatised, which made it possible to use the labour force more efficiently. On the other hand, most of the guarantees securing relatively comfortable retirement disappeared. 40 This led to a situation whereby a large share of the active population, including all its categories (by age, education level, marital status, location), is today oriented towards active work and does not count on a reasonable assistance from the state in the future (after retirement)<sup>41</sup>. At the same time, in most Russian regions the salaries are not large enough to allow people to save for old age. Moreover, the inflation rate is still rather high and salary growth does not always compensate for increasing prices. Every third respondent considers that this trend will be in place by 2030 and that many employees will have to have a second job or a job on the side. This proportion is somewhat smaller for Moscow (27.6%), which can be explained by differences between Moscow and other regions in the level of average income (more details on difference between responses in Moscow and other regions are given further below). A significant part of population (23%) supposes that it will have to work until the age of 75, which is also to a large extent related to poor state guarantees. This figure is bigger for senior citizens and families with children.

The value of leisure time is not considered as high as a good salary; the exception in this respect are the (strongly overlapping) strata of population with higher net income, higher education diplomas and inhabitants of Moscow. Here, there are clear trends of a trade off between earning more money and having more leisure time. According to a public opinion poll by the All-Russia Centre for Studying of Public Opinion (VCIOM)<sup>42</sup>, every second person in the 25–34 age category is ready to work and earn more without guarantees for the future.

## Relationships between poor and rich

The broadening gap between the rich and the poor in Russia is one of the key concerns for the government. The ratio of the average income of the richest 10% of the population against the poorest 10% of the population was 16.8 in 2007, 15.3 in

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<sup>&</sup>lt;sup>40</sup> Every person who had worked at least 25 years before the retirement age (55 years for women and 60 years for men) was guaranteed a pension that was rather high and provided reasonable living standards. It depended on average salary and, for many categories of employees (like industrial workers, school teachers and many others), was comparable with salaries of younger people.

<sup>&</sup>lt;sup>41</sup> The average retirement pension in Russia in July 2008 was 4,395 rubles (some 120 euros) a month.

<sup>&</sup>lt;sup>42</sup> See http://wciom.ru/arkhiv/tematicheskii-arkhiv/item/single/10232.html?no\_cache=1&cHash=ea07cc46a3

2006, and 14.9 in 2005, while the share of population with an income below the living wage is still some 15%. More than 40% of the respondents suppose that this gap will be further increased by 2030. This share remains over one third for all age groups and is extremely high (58%) in the case of families with three and more children. Among the most urgent signs for the Russian authorities it is the high share of people (and the older they are the bigger the share) predicting that old age poverty will still be a problem by 2030. At the same time, not many people think that wealth leads to a higher life expectancy or "affordability" of having more children.

As for other issues covered by the survey, according to most Russians, the gap between developed and developing nations will not close, top managers will earn more, and the middle class will continue to exist.

#### Education

Education issues are a concern for almost all families in Russia. They are widely discussed both in mass media and "in the kitchens". Recent education reforms in Russia were aimed at adapting the still existing Soviet-style system to the realities of the market economy. The recent President's programmes of "national priority projects" contributed to this process. All secondary schools now have access to the Internet, teachers are better paid, a few dozen of the best universities have got new computers and laboratory equipment, however, most of the problems are still there. The national tests introduced for all graduates from secondary schools have shown a decreasing level of education quality even in such traditionally secure areas as mathematics and physics. The implementation of the Bologna process is still opposed by many universities and is not yet well understood by companies.

Well educated people consider education as one of the key values, therefore very few Russians, according to the survey, believe that children from common families will have the same access to education as those from academic families. At the same time, more than one third of respondents foresee accelerating changes in the future labour market ("One fourth of the young employees work in professions which did not yet exist in 2008"). It will require life-long learning ("At least one further training per year is standard for each employee" – 24% of respondents) and early identification of future specialists ("A system to detect special abilities develops many children starting already in kindergarten" – 27%). A surprisingly big share of people (almost 50%) sees a good future for private schools, which are very rare in Russia now.

Online lectures are considered a rather promising way of teaching by younger people (26%), whereas training via mass-media and informal education are accepted with greater scepticism (12% and 16% respectively).

### Security

During the last three years, every fourth Russian was in a situation that endangered his/her personal security<sup>44</sup>. More than 40% of entrepreneurs mention corruption as a

<sup>43</sup> See Demoscope Weekly, #321–322, February 2008, Institute of Demography, Higher School of Economics, Moscow.

See http://wciom.ru/arkhiv/tematicheskii-arkhiv/item/single/3441.html?no\_cache=1&cHash=67c9920b40

key issue hampering business activities<sup>45</sup>. Despite this, many Russian people pay more attention in their answers to the future prospects at a macro level rather than to their personal problems.

The most important security issue for the future, according to 38% of Russian respondents, is potential "Warlike conflicts about natural resources like oil, gas or water" (this country has huge stocks of oil, gas, and metal ores as well as the largest sources worldwide of fresh water). Another main concern is organised crime (35%). Between 27% and 30% foresee that in 2030 "New technologies like bio- or nanotechnologies will be more dangerous than expected", "Internet-related crime will have increased very much", but "Surveillance computers will identify many criminals directly when committing a crime".

Every third respondent looks forward to higher penalties for criminal acts while a slightly smaller share of people suppose that "For many people security will be more important than their own privacy".

At the same time, most Russians do not foresee a big danger of crime from immigrants in the future (the only exception to this is in the huge megapolis of Moscow).

## **Family**

During the transition period, Russia has not only been moving towards a market economy. Shifts in family relations have also been tremendous. Only twenty years ago, very few people could imagine living together as a family without being officially married, and moreover having children. This is already not rare nowadays and some 45% of Russian respondents (and 57% of households with three and more children!) consider that by 2030 "Most couples will live together without being married". There are both economic and political reasons behind this. People have become more independent, their moral obligations are now driven more by personal and cultural values than by official regulations.

People (except the older generation) are becoming more tolerant to ways of living that were earlier considered unacceptable. More than 20% of respondents think that by 2030 "Same-gender couples will be allowed to get married and to adopt children". About 28% of male respondents and 36% of female respondents foresee that "Women will have two children on average" and "The compatibility of work and family (work-life balance) will be possible for many women".

Almost every third young person anticipates that finding a partner will become more difficult in the new society in the future and agree with the statement that "Every third partnership/cohabitation/marriage will result from Internet-dating-networks".

#### **Environment**

The value placed on clean air and water has been increasing during the past few decades worldwide. Russia, with its tremendous natural resources of forests, lakes and rivers, which are natural preserves inherited from the soviet times, has many environmental problems. Among the most urgent of these are areas contaminated with nuclear waste in the Urals and the Chernobyl zone, industrial locations of

<sup>&</sup>lt;sup>45</sup> See http://wciom.ru/arkhiv/tematicheskii-arkhiv/item/single/9720.html?no\_cache=1&cHash=0c27086006

intensive coal mining, big metallurgical and chemical plants. In some places, contamination levels exceed ecological norms by more than 10-fold. Many cities have problems with water supply.

New problems emerged during the transition and mass privatisation period: uncontrolled construction of fancy houses in locations that were earlier preserved, fast growth of traffic in the cities<sup>46</sup>, intensive use of old environmentally harmful technologies by local industries.

According to public opinion polls, the environment is listed among the most dangerous threats for human life, next after drugs, hard drinking and terrorism. Clean water is mentioned as the most important application of future technologies<sup>47</sup>. The Europe 2030 survey confirms the above-mentioned concerns. Almost half of respondents foresee that "Clean drinking water will be a luxury item in Europe". Among the families with three or more children, this share approaches 60%.

The second highest concern is the impact of pollution – some 40% said that "Pollution of the environment will be the number 1 cause of death" (and, again, next to 60% for big families).

Every third respondent agrees that most trash will be recycled but many are rather sceptical with respect to efficiency of future technologies (just 10–23% of people believe that by 2030 "The climate change problem will be resolved", "Meteorological stations will generate rain, sun or snow where it is required" or "Solar and wind energy will account for more than half of the energy production".

There is a danger that financial assistance from younger family members to older ones will decline – only 18% of respondents said that "Family members will bear the financial responsibility for old age" and for younger ones this figure is close to 10%. But older people can be sure they will not be deprived of their votes in elections.

## Consumption

Everyday consumption remains one of the most important issues for Russians. Half of the total sample and 56–58% of people with two to three children foresee that "Every day products (e.g. food) will be significantly more expensive" in 2030. Another big issue is the amount of spending on health – every third person surveyed said that "The biggest part of consumer spending will be spent in the health sector". Younger people are more optimistic with respect to increasing consumer opportunities (at least two cars in each family, buying mostly eco-friendly products) although this share is still rather modest (25–31%), they also are more technology oriented (30% suppose that "Most consumer goods will be purchased online (Internet)").

Time and tranquillity are considered as a luxury for the future by 21% of people, but this figure goes up to 36% for Moscow inhabitants (who generally work harder than average).

Every fourth person foresees that "Most food products will be produced domestically (in their own country)", whereas a rather small share (18%) anticipate that "More than half of all products will come from Asia".

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<sup>&</sup>lt;sup>46</sup> The number of cars in Moscow grows by 150 thousand a year and will exceed 5 million by 2015.

<sup>&</sup>lt;sup>47</sup> A public opinion poll by the Higher School of Economics, 2008.

## Integration

Russia, notwithstanding all the changes, still remains a country rather isolated from the outside world. According to public opinion polls<sup>48</sup>, half of Russian people would not go abroad at all, 35% would like to travel on holiday or sight-seeing, 9% to work abroad for some time, 4% to study there. Even within the most mobile category of better educated people, only 13% would like to try working abroad.

This trend is also demonstrated by the very low share (9%) of respondents who consider that, by 2030, most of people will work abroad at least once in their lives, although this is a bit higher among younger people.

At the same time, Russia is rather open and tolerant to immigrants. Just around 25% of respondents consider that "The integration of immigrants will be easier", but much less suppose that by 2030 "Faith and religion will play an important role in immigration politics", "Most immigrants will live among themselves in segregated districts", and "In most European countries integration will only work for educated immigrants".

Russians do not believe that "In Europe one third of partnerships/cohabitations/marriages will be multinational/multicultural" and that "Many European countries will encourage immigration in order to counteract the aging of society".

# Russia-specific features

The survey highlights many interesting issues related to Moscow vis-à-vis other regions of Russia. Many future trends, especially ones related to technological development, show significant differences between Moscow and the rest of the country. There are many reasons behind this. Moscow has always been a national cultural and scientific centre; it is the place for the best universities, research centres and for the better educated population, as the most creative people from all regions in Russia have always rushed to its capital as a place with big opportunities. The city is the first place in Russia for the large-scale introduction of new technologies: mobile communication, the Internet, new medical equipment, chain supermarkets, fancy shops – everything new always first appears in Moscow, then spreads to big cities and after that to other locations. New ideas also come to Moscow first: there are many foreign companies, regular exhibitions and other events. A greater proportion of Muscovites travel abroad and speak English. And the most important factor is money, which is concentrated in the city (see Figure 1).

<sup>&</sup>lt;sup>48</sup> http://wciom.ru/arkhiv/tematicheskii-arkhiv/item/single/10448.html?no\_cache=1&cHash=0106699671



It is noticeable that during the last decade many public opinion polls relating to longer-term prospects in the regions showed similar figures to those from several years beforehand in Moscow. In this respect, analysing the gap in answers between the people from the capital and the regions sometimes helps us to pick up on trends. Table 1 presents answers to some questions given by respondents from Moscow and the rest of Central Russia – several relatively poor administrative regions (oblasts) around Moscow (with the GRP per capita some five times less than in Moscow).

The figures presented demonstrate that Muscovites are more optimistic regarding economy-related issues. Many of them rate high leisure time and tranquillity; they are closer to the consumption model emerging in developed countries (eco-friendly products, importance of services, etc) and less concerned with the problem of poverty in old age.

Moscow citizens better combine traditional family values ("Family members will bear the financial responsibility for the old-age pensions of their parents") and tolerance towards unconventional developments ("Same-gender couples will be allowed to get married and to adopt children").

Respondents from Central Russia are less positive with respect to the future role of new technologies in resolving environmental problems and their use in everyday life ("Many people will wear a chip for identification and localisation") and education ("Online-lectures will be given simultaneously by the best professors at different universities").

Graphik 12.2 Moscow versus Central Russia in responses (share of positive answers, per cent)

Question	Central Russia (without Moscow)	Moscow
GRP per capita, PPP rubles, 2006	100.7	493.2
Topic: Work		
Many employees receive dwelling, food, payments for	8.5	18.1
pension funds and pocket money		
Leisure time is more important for employees than a good	16.4	30.1
salary		
Production of goods mainly takes place in developing	13.3	28.6
countries		
Many employees have second or side jobs	32.2	27.5
Topic: Relationship between poor and rich		
Old age poverty is an unsolved problem	39.9	29.8
Topic: Education		
Informal education (e.g. self-development) is more important	10.7	22.4
than formal education (e.g. school education)		
There are more private schools than public schools in Russia	44.8	29.6
Online-lectures are given simultaneously by the best	19.3	31.6
professors at different universities		
Topic: Security		
Many people wear a chip for identification and localisation	12.9	23.3
Topic: Family		
Same-gender couples are allowed to get married and to	17.6	29.8
adopt children		
Family members bear the financial responsibility for the old-	13.0	21.9
age pensions of their parents		
Topic: Environment		
Meteorological stations generate rain, sun or snow where	13.3	25.7
required		
Solar and wind energy account for more than half of the	14.0	28.3
energy production		
The problem of climate change has been solved due to	11.7	21.0
technical developments		
Topic: Consumption		
Most people buy eco-friendly products (green products)	16.5	26.2
Luxury means time and tranquillity	12.4	19.4
Service and advice are more important than a low price	10.2	18,.8
Topic: Integration		
In most European countries integration only works for	12.2	24.8
educated immigrants		

### **Conclusions**

The survey results show that Russia, still being rather isolated from the rest of Europe and having many Soviet-style features, is rapidly developing towards European values. Security and environment issues are rated higher than before, the gap between rich and poor is still there, economic problems (old age poverty, everyday consumption, etc.) will not be resolved soon. At the same time, Russian people are becoming more open and tolerant. The younger generation and people from Moscow and other more developed regions are more optimistic with respect to the impact of new technologies.

Life in 2030 will probably not be the same as the one described by respondents. People and the governments can make it better. People must be more educated, healthier, richer, and live longer in a friendly and secure environment. Let all of us just do what we can.

Spain: Pan-European Future Study 2008–2030 European Futurists Conference/B.A.T. Stiftung für Zukunftsfragen "Future Visions of the Spanish Society" Enric Bas

# The need for foresight

There are manifest concerns about the future in this historical moment of transition from the late industrial society to the information society, or the advanced technological society. This interest has been present, in an explicit or in an implicit way, in a large part of the intellectual development in the social sciences since the end of the 1970s.

Changes in the global economy, the reorganisation of markets, production and distribution processes and the labour market, the need to adapt firms to technological innovations, the problems and opportunities related to immigration, ecological sustainability, the dangers of terrorism and social instability, the impact of biotechnology on health and life expectancy, the effects of virtual reality on human interaction and the process of socialisation of citizens, etc. All of these topics are currently widely approached – from a future–oriented point of view – in research projects, consulting studies, essays or publications.

Describing and understanding the current state of issues seem to be not enough to take decisions and develop preventive policies and/or strategic plans; on the contrary, managing alternative future scenarios using a foresight-based approach, although tentative, is becoming an increasingly important activity both in public and business management.

The future-oriented method of approaching these topics shows an increasing interest in developing foresight tools and determining useful references for decision making. This interest is strongly linked to the general perception that it is necessary to counteract the uncertainty inherent in change and complexity, with a wide range of foresight exercises, from trend forecasting to the analysis of weak indicators.

Therefore, today it is difficult to find – in any knowledge-based discipline (sociology, economics, public health, psychology, ecology, etc.) – a study without this "future-oriented" dimension. There is a general concern – based on the assumption that future vision is needed to manage present issues – about the importance of foresight. Even within the areas of knowledge related to the study of the past, like archaeology or history, initiatives are undertaken that integrate an interpretation of the past with an understanding of the present and a certain future vision.

This trend of giving a greater importance to foresight and future-based approaches in research and management can be easily observed both in "basic research" (the research activity developed by universities and research institutes within public programmes or frameworks of R&D&I) and "applied research" (developed by consulting companies – public or private – and commissioned by specific clients).

In both environments, the public sector and business, the growing interest in foresight seems to be a reality.

To consider the interest of the public sector, it is enough to look at the Seventh EU European Framework Programme: although there is no specific main line taken on Applied Foresight, there is an implicit interest within the European Commission to promote future-oriented studies that can be seen easily within the different calls for R&D&I. In the same way, most of the biggest consultant companies – like

PricewaterhouseCoopers – are integrating research into the future within their research & consultancy work for companies and the state; this way, the use of future scenarios is an element which is becoming integrated increasingly frequently into the final reports for clients.

Moreover, this growing interest in the future is spreading to public opinion in general: the future is a recurrent issue within "popular culture" mass media, from the popularity of books (like Malcolm Gladwell's *Tipping Point*, which became a bestseller following the path traced by Naisbitt's *Megatrends* in the 80s) to weekly general magazines, which are full of pseudo-studies on future trends related to technology, fashion, lifestyles, etc.

The uncertainty and complexity inherent in the decision-making process are the reasons why descriptive approaches based on evidence or predictions based on short-term analysis seem not to be enough for decision makers, and even the general public. Everybody needs some kind of additional reference about "what the future could be", even if this is tentative or conjectural.

The speed that is characteristic of technological change; its multiple, multidirectional and radical impact on essential aspects of social life, like economic relationships, the values system, or everyday life (at every level: relationships, work, emotional, educational, etc.) and of organisations (management, clients, products), is producing a sensation of vertigo and uncertainty, which is motivating the growing interest in the futures vision like a tool, necessary to approach the challenges faced in the present.

## General reflections about a new reality. Towards a "liquid society"?

Since Daniel Bell suggested for the first time, about three decades ago, the existence of a structural change within the industrial capitalist society, a lot of authors have been speculating about the new type of society we are going to, and have named this "post-industrial" society using different adjectives: "network society", "knowledge society", "information society", "transitive society", etc.

In recent years, individuals and organisations have been trying to anticipate and to adapt themselves to the constant change impelled – directly or indirectly – by technological innovation. A constant change that has generated a new social reality featured by a new concept of temporality: "a temporary time", according to Manuel Castells in his book *The Information Age*. This basically means that the industrial concept of time (lineal, irreversible, measurable and predictable) is disappearing because of new information and communication technologies. As he says, we only have to observe the global circulation of capital to understand the compression of time and space produced by technological change.

Randomness, the absence of predictable cycles based on the concept of industrial temporality, is, consequently, a "new" factor for the understanding and management of social reality in general, and social change in particular. This new reality, with unclear features and whose main characteristic is uncertainty (which is a consequence of change and the complexity inherent in the creation and development of processes of social change) demands new approaches, like Foresight, far removed from the radical positivism that characterised the dominant paradigm in the 20th century.

We can find out the origin of the openness to more qualitative approaches in the public management area in the 1950s: the RAND Co. was the first "public" unit – a

think tank – working on the development of original, innovative models and methodologies based on qualitative information for the study of the future.

The 70s' oil shock and, later, crisis was the inflection point that made the big companies introduce qualitative approaches to reinforce the anticipation exercises, traditionally based on quantitative multivariable models. *The Art of Long View,* the book by Peter Schwartz, a former Shell manager, shows clearly this process of "loss of innocence" about the use of quantitative prediction. The failure of the traditional prediction models, based on quantitative information (following the dominant positivist obsession at the time) made clear the need to rethink the theoretical and methodological basis traditionally used for anticipating future scenarios.

During the last three decades there has been a significant theoretical and methodological effort committed to the improvement of the understanding of the current processes of change. It has been also a time where most of the main features of this emerging scenario, this "new reality", have been identified and analysed.

Recently, Zygmunt Bauman invented a new concept to define this new emerging reality: "Liquid Modernity". Bauman breaks away from Anthony Giddens' concept, "Late Modernity", and, even influenced by the "Second Modernity" of Ulrich Beck and the "Surmodernité" of George Balandier, he invents a new and refreshing vision about this "new reality": Bauman's concept concerns both the continuous or "solid" (becoming "liquid" by merging or losing its traditional features) and the discontinuous by nature (which can no longer return to a "solid" state).

Bauman builds up a consistent discourse about a society (that is currently being shaped) whose personal and organisational links are born with a deadline; a society where humans are just a kind of residue, or waste their life in an erratic way. This is an idea that, in a certain way, was anticipated by the Professor of the London School of Economics, Richard Sennet in his book *The Corrosion of Character*.

One of the main features of this "fluid society" or "liquid society" we are speculating about, would be – both at collective and individual levels – the loss of roots due to the continuous transitivity and uncertainty we have been reflecting on above: the absolute loss of structural referents which could serve as a guarantee of solidness, continuity and stability (in the way these concepts were perceived in the industrial society) both in social and personal life.

## A brief overview of Spanish society

Spanish society, since becoming a democracy in the late 70s, has experienced an impressive process of social and economic development that can be easily observed at all levels. In fact, even though some forecasters anticipate a decline of the "golden age" experienced by Spain (a recent PricewaterhouseCoopers report concluded that the GNP of Spain will grow by about 2.3% per year until 2050 and will rank in 15th position with Korea in the most developed countries), Spain is currently the 8th major financial nation in the world.

A solid democracy, its formal involvement in some of the main international organisations leading the current world system (NATO, UN, EU), and the high productivity of some economic sectors, have made the rises in the current levels of social and economic welfare possible.

Therefore, Spanish society is not very different to most developed countries. Lifestyles, values, political attitudes, consumption, the labour market, education and all the features that characterise Spanish society have followed the same path as

other developed countries. However, there are some elements that make Spanish society stand out, which will be explored in the following pages.

Despite these elements within Spanish society, it has experienced the process of "dissolution", mentioned before, as a main feature of the "new society", a process mainly experienced in developed countries. The old structure that, for decades, formed the framework for Spanish society is, despite some resistance, definitively changing in a fast and radical way. And this change is evident at many levels of social life: family, work, education, security, environment, values, consumption, etc.

Let us see how Spaniards see the future according to the BAT survey:

## The future of work

The first impression provided by the data is that Spaniards are pessimistic about the future of work. About a half of those surveyed consider that in 2030 many employees will have second or side jobs; this may mean, implicitly, that Spaniards feel that one salary (coming from one job alone) will not be enough to maintain the standard of living that they have achieved up until now, therefore they will have to work more to live within the same parameters of welfare that they currently enjoy. In fact, they consider salary to take priority over leisure time.

Moreover, about 40% consider that the working life will be extended until the age of 75, probably due to low salaries (retiring any earlier will make it difficult to maintain a standard of living) and the probable crisis of the welfare state in the medium term that may turn paid retirement into an impossible utopia.

Pessimism about full employment is obvious: only about 10% of those surveyed think of this possibility as a likely event, although it was one of the main promises the current government made in the last general election. A similar situation surrounds the reduction of working hours thanks to automation: only about 20% think it would be possible to reduce it to 25 hours a week.

The context does not seem optimistic: in June 2008 (around the time this survey was carried out) unemployment rose by about 1.5%. This was the first time since 1996 that unemployment had risen in June, a traditionally strong month for employment. But this is not isolated data. Unemployment has grown from approximately 8% to approximately 10% in just one year, and the prospects for the near future are not good (about 1,000,000 employees may lose their jobs during 2008).

Both factors of structure and conjuncture have merged to define this situation of crisis in Spanish society: mainly the rise in oil prices (at a global level) and the Euribor (in the Euro area), and the poor health of economic sectors traditionally relied on in the Spanish economy, like construction.

The dramatic fall in building activity and property sales, following the bubble effect experienced in USA, has been the starting point of a process and nobody knows where it will lead. The decline of this sector is affecting other related economic activities which have been the main generators of employment in Spain during the last decade (during the last three years, the construction industry has been the main employment sector).

Moreover, most of the immigrants who arrived in recent years (those who were supposed to maintain the welfare state with their taxes and to pay the pensions of retired Spaniards in the future) have been employed in the construction industry or in subsidiary ones.

Therefore, the outlook is harsh, at least in the short term, and the public feels that some structural changes will take place in the field of work. Spaniards have survived the first phase of the "dissolution" of traditional work (lifelong contracts disappeared and at the same time flexible and temporary contracts grew exponentially in the last decade) because the welfare state was working properly, the economy was healthy and – despite the low salaries related to European standards – family, as a social institution, has been a definitive support in daily life.

But now the expected changes are rising dramatically: globalisation has seriously affected many traditional basic sectors (tourism, shoemaking, furniture, toys, ceramics, etc.) that are looking for ways of surviving in a new environment; the traditional concept of the family is changing fast and its traditional role of an extended network of support is getting lost; immigration may change from being salvation to a problem if the current state of affairs is maintained; the welfare state could be at risk in the medium term. All of these changes will affect the future of work, both in quantitative (employment generation or removal) and qualitative (hours per week, salaries, vacancies, contracts, etc.) terms.

## The future of the welfare state – or the (re)distribution of wealth

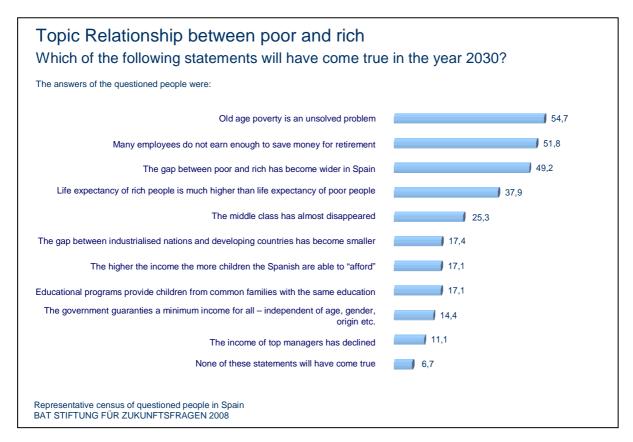
This subject was also predominantly pessimistic. Most of the Spaniards surveyed (about 50%) think that by 2030 poverty of the elderly will remain an unsolved problem, retirement under clean conditions will be difficult – or impossible – for the majority of the employees, and the gap between the rich and the poor will become wider in Spain.

This last point – the widening gap between the rich and the poor – is reinforced by the fact that just about 15% think that the income of top managers will decline and the government will guarantee a minimum income for all. This feeling can be translated to the global level: only about 17% believe that the gap between industrialised nations and developing countries will become smaller.

These opinions may seem to contradict the fact that only 25% of those surveyed consider that the middle class will almost disappear. However, if we take a detailed look at the various surveys during the last two decades in Spain, we will realize that the margins of income (and the professional or educational level) among Spaniards who consider themselves "middle class" are very large.

If we take a critical look at these surveys, we may see that both those who have an income of 6,000 euros per year and those who have an income of 120,000 euros consider themselves to be "middle class". The same applies for those who work in low-qualified jobs and top managers, or people with no qualifications and people with PhDs.

In my opinion, and according to my experience, this phenomenon could be rooted in the anthropological and cultural level. In addition, there are lessons to be learned from the rapid economic growth and the social development of Spain over a few decades, and from our recent democratic tradition that may have perverted the concept of "equality".



Consumerism, the generalisation of higher education, the financial economy, the welfare state, and – again – the family as a network of support, have acted as a kind of "tabula rasa" creating a kind of illusion of the meaning of "middle class". In this way, those with low levels of education and/or income feel "middle class" through consumerism (a cultural issue: if you wear Armani glasses or drive a BMW, although they were bought on credit or by your father, you look, and feel, like a "winner"). Those with a high level of education and/or income need to empathise with the community (also a cultural point) by hiding their real status. Therefore, everybody feels – or, better, defines themselves as – "middle class".

However, the financial crisis, the end of a long period of growth and prosperity, and the decline of the family as support could change this self-perception within a few years. It could be argued that the survey shows, in some way, a shift towards more pessimistic attitudes.

#### The future of education

There is significant agreement (more than a half of those surveyed) regarding the leading role that women will have in the future, where they will assume leading management jobs. Some processes are merging to make this trend possible, at least in Spain: women tend to be more successful than men at university, laws are making the reconciliation between work and private life possible, and women tend to show a greater sense of empathy in work that makes their integration in teams and firms, and their ability for leadership, easier.

About 30% assume that there are new professions (nothing to do with the current ones) emerging that will build up a new environment for young employees. Approximately the same percentage of those surveyed think that online education, conducted by leading professors, will be taking place in 2030. These factors,

together with the fact that about 20% think that gifted children could be educated properly from kindergarten, and that the media will have an influence on approximately 30% of the educational process, show us that – although this behaviour is not widespread – there is a critical mass among the Spanish population with the perception that education will be quite different to what it used to be.

In Spain, education has been considered a basic right for almost 40 years. Social differences and the lack of democracy until the late 70s made education a luxury item only accessible for a few. Therefore, universal education became a priority, although this caused a loss in quality. It is a fact that quality in education, at all levels, has been improved, but free access has taken the highest priority, instead of meritocracy.

This means that, at least in higher education, the "equality of opportunities" (related to the lack of resources, but also linked with personal merits and abilities) was substituted by a kind of equality closer to Cuban, rather than Swedish, logic. Without entering into moral or political issues, the fact is that this way of understanding higher education has produced –and still produces – a kind of perverse effect: the work market does not fit with the educational courses on offer (both quantitative and qualitative), and increasing numbers of graduate (or even doctorate) students have to accept underemployment just to survive. Moreover, overcrowding makes the educational process a difficult task, which means that the teachers are also affected.

The expected changes introduced by the "Bologna Process" are intended to be a solution for some of the problems described. However, the reluctance of students and institutions makes this process difficult. The Market and Education are still seen as unrelated, and this may be a problem in the medium term since this perception may affect future professionals who intend to operate in a global market.

The results of the PISA 2006 Report showed a worrying scenario for Spanish education. The competitiveness of graduates, who are significantly lacking in languages and other basic abilities, could be damaged. The lack of funding for R&D&I (Spain is below the European average in terms of public investment) does not help the situation.

# The future of security

Although the economy has recently moved to first place in the main concerns of the Spaniards, security issues are within the "top three". 11-M definitively instilled the fear of terrorism, and security issues in general, in the collective soul of Spanish society. Only the time that has passed since the attacks, and the emerging economic problems, have put this fear to a lower level.

Sensitivity towards organised crime is increasing progressively in Spain, mainly due to the fact that citizens did not perceive it as an alien problem, but as a problem affecting their daily lives. This may be the reason why about 50% of those surveyed consider that this will be a major problem in Europe by 2030. There is a similar sensitivity with regard to e-crimes and wars due to the fight for natural resources; both problems are currently very present in the minds of the public.

In terms of social stability, the fact that about 36% of those surveyed consider that immigrants and foreigners are a potential risk for the increase of crime is worrying. A similar percentage considers that computer surveillance is the key to the fight against criminality. Both perceptions, together with the fact that about 30% consider security more important than privacy and consider that the use of chips for personal

identification is likely in the future, could be considered a kind of "weak signal" for a potential social and political support for social control policies in the future.

In my opinion, one of the main potential problems of security in the near future could be social stability, a kind of crisis of democracy, the perversion (or "dissolution") of the current basis of the social system, and the formation of a kind of "Big Brother" state in Spain, Europe and most of the developed countries.

# The future of family

The biggest agreement among all the topics questioned in the survey for Spain is on the fact that in 2030 most couples will live together without being married (61%). The other main agreement concerning family issues is that same-gender couples should be allowed to get married and to adopt children: about 50% of those surveyed.

These two key points are suggestive of a radical change in what used to be the traditional pattern of the Spanish family. The prospects for the citizen are linked to a present reality: nowadays, living together without being married is the norm in Spain, as are homosexual marriages and their legal ability to adopt children. This is very interesting since these radical –from a cultural perspective – changes (mainly the latter) are not seen as a mere anecdote but as a solid change. Therefore, we may conclude that the perception about what family is – or should be – has changed definitively in Spain.

Among the rest of the items considered, I would like to outline two of them, which have been supported by more than the 25% of those surveyed: first, the assumption that in the future people older than 60 will share flats (and there will be even more in this age group than people in their thirties); second, the assumption that family members will give financial support to their parents. Both of them also suggest patterns of change in the perception of the traditional behaviour of Spanish families: the elderly will not stay at home any more (as has always been the case) and instead of giving money to their sons (which was the norm); they will receive money from them

In my opinion, the first pattern is much more probable than the second: the second is possible according to a future vision based on extrapolating the current state of affairs. It does not take into account that there is also an alternative scenario where the elderly people could perhaps have the highest economic power and stability than the former generation, their sons (for the first time in Spanish history).

The truth is that the family, a basic social institution in Spain and other countries with a Catholic cultural background (like Italy), is becoming "liquid" (multiform and changing); traditional family is being dissolved into a new environment, and probably will lose its historical social role definitively.

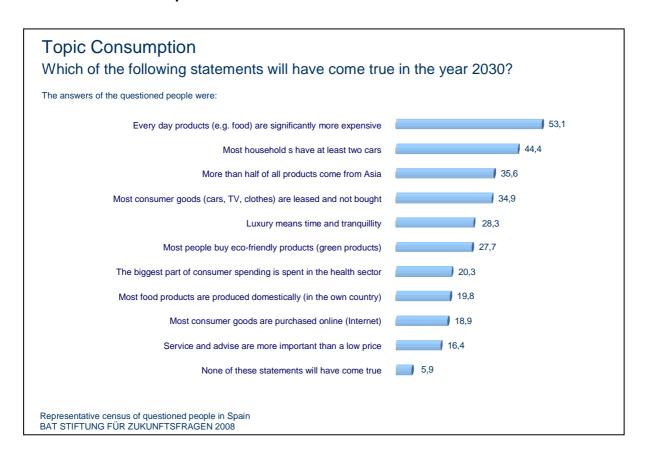
#### The future of the environment

Spanish society shows a similar sensitivity to sustainability compared to other developed countries. Ecology arrived late to Spain, and maybe there is not so much effective action (both public and private) or such a long-time tradition in sustainable behaviour as in other countries, but public opinion tends to show a general concern about the importance of sustainability.

This sensitivity can be seen in the opinions of those surveyed: more than a third (between 35 and 57%) of the population seems to believe strongly in the need to recycle rubbish, preserve water resources and produce solar and wind energies. In fact, they believe that sustainability will be the path to follow by 2030, although only about 12% think that the problem of climate change will be solved by technological developments.

I must say that I am sceptical about all these beliefs, at least in the case of Spain. Sustainability and ecology have become more of a fashion trend than a solid reality instilled within the majority of the population. In my opinion, a culture of sustainability is not instilled in the mind of the public. The lack of basic education and information about this topic, the merely nominal measure taken by the governments, and the expense and complications of recycling and/or using alternative energies can be detrimental factors for the development and spreading of a genuine attitude among the public.

## The future of consumption



While having a look at the results of the questionnaire, it is easy to conclude that Spaniards may tend to think of the future as a mere extrapolation of what is happening in the present. The prospects for consumption seem to be just a radiography of the present reality and current events in Spain.

More than a half of those surveyed think that in 2030 everyday products will be more expensive (this is something we have been experiencing for the past six months, on a day-by-day basis). In fact, price is an absolute priority: only about 15% consider that service and advice are more important than a low price. This could be the reason why about 20% (it is not the mainstream but a powerful weak signal)

consider – and this is very interesting and a new development – that most food products will be produced domestically.

Despite the increasing prices (and the pessimism about work shown before), paradoxically almost a half (44.4%) consider that most households will have at least two cars (a sign of prosperity). Once more, extrapolation is the norm: everything will be the same as it is right now.

Finally I would outline another main question: about 35% (one in three) of those surveyed thinks that most consumer goods (cars, TV, clothes) will be leased and not bought in 2030. This is very interesting coming from the citizens of a country where property is sacred: while in most European countries renting has been, for decades, the normal means of access to a household, in Spain, renting has been – and still is – an activity carried out by few, which is limited and expensive. Everybody in Spain wants to own a home, a car, a TV, etc.

As suggested before, consumption has been a key point in Spanish society in recent years: being an owner of things meant social success; and this has propelled consumerism exponentially in a kind of society – like the Spanish one – where the public dimension (and the image which everyone projects to the collective) is key to understanding the individual behaviour.

Traditionally, Spaniards, unlike other European citizens, have been reluctant to use methods of accessing consumer goods other than owning them. Therefore, this is a very interesting pattern of change that implies a substantial cultural change.

## The future of integration

In recent times, Spain has been one of the main countries – if not the main one – receiving immigrants in Europe. Most of them come from Latin America, because of the deep cultural common linkage, and Africa, because of its proximity. The flexibility of recent governments in giving residence permits to immigrants has been having a "call effect" and has shaped Spain in many of the Latin American and African immigrants' minds as the favourite destination among all possible ones in Europe. On the contrary, the number of immigrants coming from Europe is less significant. Almost 40% of those surveyed think that this trend will carry on by 2030. This is probably because many people (about 25%) think of it as a kind of counterweight for the ageing process and, consequently, as a means of salvation for the welfare state.

Finally, I would also like to emphasise, within the topics covered in the survey and related to integration, the relative scepticism about an improvement in the integration process (only about 30% think that immigration will be easier; a figure too low – in my opinion – if we consider that we are talking about 22 years into the future). For this reason, I fear the existence of a kind of racist seed that could be activated if the economy suffers and unemployment rises.

However, optimism, in general terms, is the dominant attitude: one in four thinks that marriages/cohabitations/partnerships between multinational or multicultural couples will be the norm in 2030. Those surveyed are also reluctant to adhere to the idea of Europe as a fortress (something that, curiously, has been predicted as highly probable according to experts working with the Delphi Method): only about 20% think of it as a real possibility.

### Switzerland: Future cultures need translation

**Andreas Giger** 

How the countries in the study not only differ in their visions of the future, but also in their future cultures. Why the future of the Swiss community raises fears and hopes. Why we need translation between the future cultures – and who is best qualified for the job.

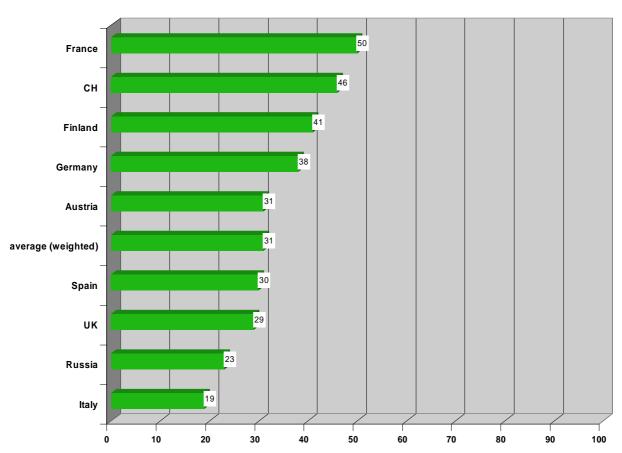
At first glance, "my" Swiss results look quite interesting. But as they stand, they don't exactly knock me sideways. What I'm missing are the comparative values from the other countries. Without them, I can't really make rhyme or reason of the responses from Switzerland. When I enquire, they are made available immediately.

It is not exactly easy to compare at a glance the figures for eighty scenarios from nine countries (plus the weighted European average) so that similarities and differences emerge. So I concentrate first of all on the bottom line in each category ("None of these statements will have come true"). As I do so, I notice that the values from Switzerland for this response option are always among the lowest. I do some adding up and discover that indeed, the opinion that none of the statements is true is selected six times less frequently by Swiss respondents than by the European average. Which surprises me rather – after all, my fellow Swiss are, quite justly, not exactly known for being very voluble.

However, this curiosity doesn't get me very far at first, so I start to compare individual statements. In doing so, I quickly ascertain that the values from Switzerland are consistently higher than the average. Only France appears to range on a similarly high level, whereas the values for Italy and Russia are always very low.

## Surprising anomalies

## Average affirmation of all scenarios (in percent)



Now my curiosity gets the better of me and I add up eight hundred individual values in order to establish what percentage of those surveyed answer a given proposition from the average of all eight scenarios in the affirmative. The result is astonishing:

Certain differences in the degree of responsiveness are to be expected. But that the average affirmation per proposition of the first country in this ranking should be two-and-a-half times higher than the last, and that of the second still twice as high as the second-to-last – that does seem pretty unusual. There must be something behind it. But what?

It can't just be differing degrees of optimism or pessimism regarding the future, since the different agreement rates relate to both optimistic and pessimistic predictions. In the different countries, the probability of scenarios occurring is assessed differently independently of the content.

#### Cold leads

Could different intellectual capabilities have something to do with it? Certainly, it takes power of imagination to answer questions about the future. But it seems highly improbable that this capability should be so differently manifest in the individual countries. Just as improbable, incidentally, as the supposition that the intellectual effort required to answer the questions is so unevenly distributed among the countries that it could feasibly serve as an explanation for such disparate agreement rates.

So we are not going to find our pattern of explanation on the intellectual plane. That can hardly come as a surprise after all, given that the questions as to how likely it is that certain scenarios will have come true by 2030 are not really asking about the future, but about our present-day visions of the future. And we are not talking here about cool, rational considerations, but about emotions. To be more precise: fears and hopes. When we predict the occurrence of a scenario, what we are expressing is that we hope for or fear this development. No more, no less.

The future triggers fears and hopes in all of us – in other words, emotions. Could it be, then, that the big differences in the average level of agreement can be accounted for by different emotional sensibilities with regard to the future? Though admittedly, you won't hear anyone suggesting the Italians are an emotionally cold race. Nor that the Swiss and Finns are particularly passionate. Yet the one group is at the bottom of the ranking and the others among the top three. So this has proved to be a cold lead. It would, let's face it, be strange if a basic anthropological constant such as the fact that people worry about their own and their children's future, and that this gives rise to hopes and fears, were to be so unevenly distributed among individual countries and hence cultures. Only – that wasn't what this survey was about. It wasn't asking about people's individual future, but about the future of society as a whole.

#### The individual and the whole

And that's not the same thing at all. I recently conducted a survey of my own in Switzerland that was about future prospects. Among other things, the survey asked how people thought their own quality of life would develop over the next few decades. And the average quality of life in Switzerland as a whole. The individual prognosis showed a slight increase, that for the whole country a definite downward trend.

In another survey, a couple of years back, I asked how various future developments and trends would be likely to affect people's own life. And that of society as a whole. Here, too, considerable differences emerged.

The phenomenon is not new: people often assess their own situation and own views differently to the general situation. In other words: general future prospects do not affect people's individual future on a one-to-one basis. But could it be that in some cultures this gap develops into a veritable divide?

If this were the case, it would mean that in such cultures the influence of the general future on the individual is considered fairly insignificant. The relevance of the future of the whole would then be fairly inconsequential. The individual wouldn't care one iota. And when something doesn't affect us, when we don't care, then we don't take the trouble to give it much thought. Which in turn means that in case of doubt, we are more likely to say No.

So is the average affirmation of all scenarios a measure of how important the future of the whole is to a given culture or country – and of course consequently of how important the whole is altogether? On the basis of this hypothesis, the two extreme poles in the ranking suddenly make sense: as I write these lines, Italians are yet again debating privatising art monuments like the Colosseum – an idea that in France would be totally inconceivable. And that is just one nice little illustration of the differences between the two cultures.

In France, the nation, society, the whole are very high up the agenda, the individual derives an important part of his identity from his participation in this collective. Not so in Italy, where for the individual the whole in the form of the state for the most part seems to be there to be fleeced or screwed, an attitude for which the present prime minister is a text book case – which is most probably the key to his success. Who in Italy cares what the world as a whole will look like in over twenty years?

The situation in France is quite the opposite. If my own identity is closely bound to the whole, then it's only logical that I should give thought to the future of that whole. And the more I think about a particular topic, the more likely I am to be able to picture certain scenarios.

Is this the explanation for the enormous differences in the average agreement? If this were the case, then our hypothesis should also provide an explanation for the second-to-last and the second place. Now in the case of Russia, I don't feel competent enough to judge. But Switzerland is another matter. What sort of relationship do the Swiss have to the whole?

## Fragile community

Before we go any further, we need to differentiate: the whole is not to be equated with the state. If our ranking were an expression of faith in the institution of the state, Germany would surely rank considerably ahead of Switzerland. By the same token, neither is the whole identical with the concept of nation – a comparable notion to the idea of "grande nation" revered by the French does not exist in Switzerland. The word collective is frowned upon anyway in freedom-loving Switzerland, and the term society is, as everywhere, rather too abstract to be a common good. The word that is most readily accepted in Switzerland as an expression of the whole is, therefore, community.

This community is extremely popular. Not because it automatically emerges as a result of belonging to a nation or a language area, but on the contrary, because it is

so fragile. Actually a historical anomaly, seeing that Switzerland unites the three corners of the German, French and Italian cultural area in a single country, unique in Europe, and therefore is also latently always at risk, at least as far as the country's self-image is concerned.

Such a fragile community almost inevitably tends to shy away from conflicts wherever possible. The rise of far-right Christoph Blocher's SVP party onto the political stage has unsettled so many people in this country precisely because with its crudely declared claim to defend Swiss tradition it in fact puts its most valuable accomplishment at risk, namely the capacity to always find a consensus, or at least a compromise. This in turn requires a minimum of respect between political rivals and the will to mitigate conflicts rather than stir them up.

Even if in the political arena Switzerland has in the past few years taken a step in the direction of the conflict culture commonplace elsewhere, the desire for a preferably conflict-free and harmonious community remains a basic element of Swiss mentality. And inherent in this, quasi as a mirror, is a pronounced fear of conflict situations. In this country, the topic of conflict awakens hopes. And even more fears.

#### Fears for the future ...

In the already mentioned recent survey about Switzerland's future prospects in the next decade, respondents painted a fairly encouraging picture of the country's economy. By contrast, those surveyed tended to have a bleaker view of the future of social cohesion in Switzerland – a clear indicator of existing fears over a collapse of the fragile community.

The present study confirms this view. Even if we take into account that in Switzerland all of the scenarios are in any case felt to be considerably more likely than in the European average, the Swiss respondents show a much higher tendency still to agree for those scenarios depicting conflicts. In other words, they are much more fearful of these situations than the rest of Europe.

This applies to the increasing divide between rich and poor and to the disappearance of the middle class. However, it also applies to poverty among the elderly as an unsolved problem and the increasing inability of many employees to put something by for their old age. It takes some imagining: in a country which of all places is widely recognised as having a good solution for retirement provision, fears of the system failing are considerably stronger than in countries that can only dream of achieving Swiss standards. As is so often the case, fears do not always entirely mirror reality. But the consequences of such a failure of the community are obviously so horrendous for the Swiss, that the very thought terrifies them.

Fears of other conflicts are also very pronounced in Switzerland. With a much higher-than-average score, fears of an increase in organised as well as Internet crime are rife in Switzerland. This also applies to conflicts between cultures and religions. Nowhere else is concern so frequently voiced that the crime rate among immigrants will be twice as high as that of natives – and that integration only works for better-educated immigrants anyway. Add to this list a concern that at first glance may seem somewhat bizarre, but which also bears witness to fears of a break-up of the community: in no other country did respondents so frequently agree with the scenario "Identification/empathy with the employer is low".

#### ... and confidence in the future

When the need is greatest, help is never far away, as they say, and so not only are Mr and Mrs Swiss far more afraid of the threat to their community from conflicts than their fellow Europeans, but they also have more pronounced hopes. Examples of this tendency can be found in various categories. For example, people in Switzerland are far more optimistic than in other countries that two decades from now most of our rubbish will be recycled and that the use of renewable energy sources will increase dramatically. There is greater confidence that demographic problems can be solved (day-care centres for senior citizens), or that advanced training will be available for all adults.

The Swiss show confidence in their own abilities in the belief in the proposition that personality development will be more important than formal education; confidence in the abilities of the community in the belief that new methods will be developed for detecting special abilities in children from an early age.

It is interesting that with respect to Swiss respondents' hopes for the future, technology, in particular digital, plays quite an important role compared to the rest of Europe. People in Switzerland are far more ready than in other countries to believe that it will make valuable contributions to the fight against crime (surveillance computers, data exchange), education (online lectures), goods supply (online shopping) and even meeting a partner (dating networks).

And on the subject of surprises: of all places in the country that for so long denied its women suffrage and the right to vote, confidence in the continued progress of female emancipation is far more pronounced than in the European average. People here expect more women to be holding leading management positions and be able to strike a balance between work and family life.

The Swiss also take a liberal stance when it comes to personal relationships and are of the opinion that most couples will live together without being married, same-gender couples will be free to get married and adopt children and we will see a further dramatic rise in the number of multinational or even multicultural partnerships. All this is also linked to the specifically Swiss form of community: a fragile community made up of different cultures in a confined space cannot survive unless there is a good measure of mutual tolerance. Live and let live. Not necessarily with one another. But, with as few frictional losses as possible, next to one another.

## Discovering future cultures

All this should serve to confirm the hypothesis: in Switzerland the whole in the form of the community is so important that contemplating its future produces far more fears and hopes than, say, in Russia or Italy. In a comparison that was actually only intended to show different expectations of what the future might hold, we have in fact discovered something much more profound: different future cultures. These differ less in individual expectations of what the future might hold and much more in the degree to which the individual is affected by the future (of the whole), and hence the intensity of the individual's reflections on this future.

The existence of such varying future cultures within Europe is not totally unproblematic. It is in the nature of a culture that its members view the basic foundations of their culture so much as a matter of course that they never question them; on the contrary, they similarly assume that the same basic foundations are also a matter of course in all other cultures. If that is not the case, as we have seen here in

the differing degree of relevance of the future of the whole, misunderstandings are bound to happen.

So if we don't want the vital dialogue within Europe about the collective future of our continent to end abruptly before it has really got off the ground because the gap between the different future cultures is too wide, we need to translate between them.

#### The art of translation

The high art of translation deserves our highest respect. That translation is more than simply a mechanical one-to-one transfer is apparent from every second instruction manual and the strange texts still produced by machine translation systems. Good translators in fact move in two language worlds without identifying either with the one or the other. Instead, showing an acute awareness of the degree to which a language culture influences the meaning of words or sentences, they endeavour to convey to the one world as much as possible about the other, in the knowledge that this must always remain an imperfect labour.

This demands enormous attentiveness and concentration on the part of translators, but also gives them something in return. Namely by moving in equal measure and feeling at home in two or more worlds, they have the opportunity to pick out the best of all worlds and combine this to create their own individual mélange. The role of translator therefore creates additional scope for developing their own identity.

Multilingual Switzerland is au fait with the art of translation. No wonder, then, that the scenario which claims that by 2030 most Europeans will speak two languages fluently appears much more plausible in Switzerland than elsewhere. And a comfortable majority in Switzerland hope that translation machines will facilitate dialogue between the language cultures – in the UK by contrast this is only the case for four percent ...

It is my impression that Switzerland is facing an impending new challenge, namely to translate between the different future cultures in Europe. And it is – if I may be forgiven for displaying a trace of patriotism – excellently qualified to do so. But keeping a lid on the euphoria in true Swiss style: it doesn't know it yet.

# U.K.: Pan European Scenario Building United Kingdom to 2030

Wendy L. Schultz

## Introduction

The actual challenge of our times consists in building up...images of the future inspired by a renewed *influence-optimism* which can lift us out of the lethargy of our present *essence-pessimism*. <sup>49</sup>

Fred Polak's epic work on civilizations and images of the future issued a call to vision: he proclaimed the need for the revitalisation – and rebalancing – of the Western view of the world, the re-enchantment of our world and the regeneration of our sense of efficacy in creating an optimistic future. This serves as the central goal and the heart of futures studies: the invitation to the world – not merely the West – to participate in a dialogue about futures possible and futures preferred in order to create and promulgate a transformative vision of a positive future for humanity and the planet. As the Discovery Channel has put it in their current and infectious ad: just awesome; I love the whole world – it's such a brilliant place. 50 That 'brilliant place' comprises multitudes of pasts, presents, and potential futures. The first step must be examining our assumptions and worldviews in order to disturb our complacent understanding of those multitudes. Disturbing our assumptions will create turbulence, a dynamic space in which to envision and promulgate transformative memes - or, to blend Sarkar<sup>51</sup> with Polak, to generate and nurture microvita of influence-optimism.

This project sets the stage for a dialogue within European communities about assumptions, possibilities, and preferred local futures for Europe to 2030. As you read, consider what challenges the results present for creating a vision of a positive future for Europe and for the world.

#### The Survey

In early June 2008, the BAT Stiftung für Zukunftsfragen (foundation for future forecast), Hamburg, commissioned the research firm Gfk Marktforschung, Nurnburg, to administer a futures-focussed survey in the United Kingdom. This survey and the subsequent analysis form part an over-arching "Europe 2030" project, investigating what the European public thinks are likely outcomes over the next two decades in eight issue areas:

- Work;
- The relationship between the poor and the rich;
- Education;

<sup>&</sup>lt;sup>49</sup> Polak, Fred. L. Chapter II, "The Image of the Future and the Actual Future," from *The Image of the Future: Enlightening the Past, Orientating the Present, Forecasting the Future, Volume One: The Promised Land, Source of Living Culture.* New York: Oceana Publications, 1961, p. 52.

<sup>&</sup>lt;sup>50</sup> Discovery Channel, "I Love the Whole World," retrieved 30 August from: http://www.youtube.com/watch?v=at f98gOGY0.

<sup>&</sup>lt;sup>51</sup> Inayatullah, Sohail. "Microvita and Social Evolution, " in *New Renaissance*, Volume 10, Number 2, Issue 33 (Spring, 2001).

- Security;
- Family;
- · Environment;
- Consumption; and
- Integration.

Within each topic, surveyors asked respondents to identify which specific statements will have come true by the year 2030 out of ten topic-related possibilities. For example, under the topic of "Work":

- 1. Most employees have to work up to the age of 75;
- 2. Many employees have second or side jobs; etc.

Respondents also had the option of choosing an eleventh possibility for each topic, "None of these statements will have come true."

Resulting data were presented both in aggregate – percentage of **all** respondents who thought a statement would be true by 2030 – and disaggregated by gender, and also by age band (16-34 years; 35-54 years; and 55+ years). This disaggregation provides some indicative (but by no means conclusive or exhaustive) starting points for discussions either of differing gender or generational narratives regarding our possible futures.

Gfk Marktforschung selected a representative target group of 1,000 males and females 16 years of age and older from the British population, from which 964 completed questionnaires emerged for analysis. Interviewers used a fully structured formal questionnaire that allowed no deviation in order or wording of each question, and interviewed all respondents face to face. Complete datasets are available; the following summary merely highlights key insights.

#### Results

The results indicate a deep pessimism regarding the UK's ability to create positive change in the face of entrenched challenges over the next two decades. Many of the survey statements express fears or concerns. Very few garner an overwhelming percentage of "true by 2030" responses. Many statements generate 50-50 or 60-40 patterns. Difficulty arises in interpreting the "flipside" responses, because voting "unlikely" to a negative is not equivalent to voting "likely" to a positive. Concepts of "weak signals" also suggest that in some cases, the 25% of respondents voting "true by 2030" might simply be recognising an emerging change ahead of the majority.

With those caveats in mind, the following paragraphs consider the responses in each topic category, with connections highlighted between topics where appropriate. An overarching summary synthesising the interconnections will follow the topic-by-topic discussions.

#### Work

People in the UK are clearly worried about their finances and maintaining cash flow during their senior years: 64% think that by 2030 most employees will need to work until they are 75. That represents a considerable shift from the current national "default" retirement age of 65 (this policy due to be reviewed in 2011). This emerges as the biggest certainty within the "Work" topic, and is perhaps the reason why 45% of respondents feel many people will have secondary or side jobs in 2030.

More interesting is the gender perspective with regard to the certainty of second jobs being common: where 39% of male respondents felt that would be true, over 50% of female respondents thought most people would have side jobs. This perspective may be conditioned by assumptions of continued gender inequity in pay and in retirement income.

Fewer than one-third the respondents thought any of the other statements would be true. With regard to the internationalization of production, less than a third find it likely that developing countries will produce most of the world's goods. With regard to employment, only about one-fifth of respondents thought the largest European corporations would employ the majority of the workforce. One – rather optimistic – interpretation of these results is that most people think that by 2030 much of the production of goods will still be located in the developed world, and that small- and medium-sized enterprises throughout Europe will be employing people in that production. Furthermore, workers are likely to be loyal to their company – less than one-fifth of respondents thought that worker identification with their company would be low in 2030.

Generally, respondents seemed to think that little change would occur in the culture of work in the UK: four-fifths or more of people surveyed rejected the notion that leisure would be more important than a good salary, or that in-kind payments (dwelling, food, pension, pocket money) would replace salaries, or that automation would shrink the work week to less than 25 hours, or that the impacts of globalisation even on local businesses would be such that every full-time employee has worked abroad at least once. Nor did they think that unemployment would be solved, with only 10% assuming that full employment might be possible.

The single indication that some respondents realised that the culture of work could shift, and might, emerged from the over-55-year-olds. In this age group, over a quarter thought automation would shrink the work week – and this is the age group that has lived through the roboticisation of industry. In contrast, only one-tenth of the 16-34-year-olds thought automation would shrink the work week. What underlies this difference? Are the soon-to-be-retired thinking of the efficiencies of industrial automation, and the cohort just entering the workforce assuming that computerising the workplace just means longer hours at the keyboard? Is the overall reluctance to acknowledge the potential for change in the workplace a symptom of worry about income in an uncertain global economy?

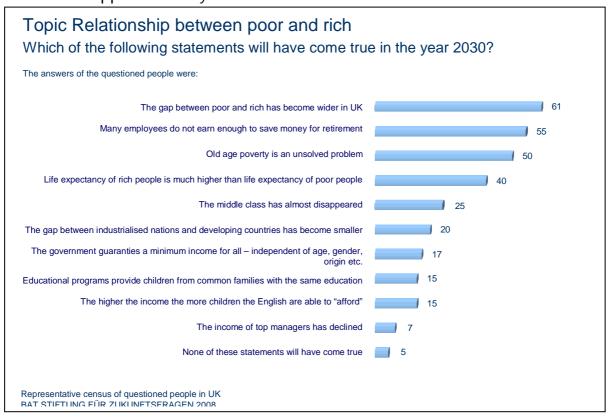
## Relationship between Poor and Rich

Given the assumptions reported above about the need to keep working, it is no surprise that almost two-thirds of respondents assume the UK's have-have not gap will increase by 2030. Furthermore, half the respondents assume that old age poverty will remain unsolved, especially given that the salaries of many will be insufficient to allow savings for retirement – it is also no surprise that half the respondents assume many workers will have second jobs. Younger people are slightly less pessimistic, with only 40% assuming old age poverty will still be a problem in 2030, compared to 55% of the over-55-year-olds – a clear indication that life-stage affects perspective on this issue.

Most see the people at the top continuing to reap a disparate proportion of economic gains – only 7% think that incomes of top managers will decline by 2030, and almost a quarter of respondents are pessimistic enough to assert that, far from

salary inequities declining, the middle-class could actually disappear. This pessimism extends to the global economy, as only a fifth of respondents feel the gap between rich and poor countries will diminish by 2030.

The UK may become a nation of the happy – and healthy and long-lived – rich, and the desperate, over-worked poor: 40% of respondents think the rich will have much longer life expectancy than the poor. Survey results generally indicate a deep pessimism regarding government responses to issues of poverty and welfare: 17% or fewer feel the government will guarantee a minimum income, or provide equal educational opportunities by 2030.



In fact, one of the few areas of optimism is in regard to children: 85% of respondents disagree with the notion that in 2030 the more you earn, the more children you are able to "afford" (or it could mean they think even wealth won't make raising children affordable). This may indicate optimism regarding government support for children's welfare and education. It is also interesting to note that the older respondents are more likely to think that the global poverty gap will decrease by 2030, perhaps as a result of having lived through an era of growing prosperity globally.

#### Education

People apparently see education infrastructure as slow to change, although shifts are emerging. Less than a quarter of respondents thought that by 2030 private schools (independent schools) would outnumber public schools in the UK, or that the system would test for special abilities as early a kindergarten, or that media become responsible for one-third of education, broadcasting special programs for the purpose. As far as education, employees, and businesses, only a quarter of people responding assumed business would take a more aggressive approach to human

resources, with big companies sending talent scouts to elementary schools to look for new recruits, and all businesses instituting annual training as standard.

Over two-thirds of respondents saw no changes emerging in either education or the workplace opportunities for which education prepares students. But within the group who did assume changes, we can see an interesting variation. One-third of people surveyed thought that on-line lectures by the best professors from different universities would be available simultaneously for student use. One-third also thought that by 2030 about a quarter of jobs would be in professions that do not yet exist. But the youngest respondents and the oldest differ in how they perceive these two statements: with regard to education on-line, 35% of the youngest respondents assumed that would be true, compared to only 29% of the oldest respondents. In contrast, older respondents were more likely to acknowledge that by 2030 one-quarter of new employees will be working in jobs that don't currently exist. In both cases, these responses may be coloured by experience: in the first case, the younger generation having used distance learning media, and in the second case, the older generation having lived through the creation of entirely new professions.

On the positive side, about half the respondents felt more and more highly qualified women would be leading management teams by 2030. Almost half assumed language skills would increase, with most Europeans speaking at least two languages fluently, perhaps as a response to the demands of competition in an increasingly globalised world.

## Security

Security produced some of the strongest responses. Over half the people responding felt that organised and internet crime would be rife. Similarly, over half the people surveyed felt resource wars – conflicts over oil, gas, or water – would be common. 2030 will be both crime-ridden and conflictual. But at least new materials would cause few problems: only about one-fifth thought bio- and nanotechnologies would be even more dangerous than expected.

On the personal level, concerns about security overtake the need for privacy, and colour their views of "the other", in this case, local immigrant communities: over one-third assumed security would take priority over privacy, and that immigrants would cause twice the crime of native residents. In 2008 the UK has already deployed the highest number of security cameras of any country in the world. Respondents' stated security concerns may therefore influence other assumptions: nearly one-third of respondents assume the UK will deploy digital surveillance sufficient to identify many criminals directly when committing a crime, and that part of the surveillance network within the UK may well be embedded microchips that people adopt for identification and localisation. About a quarter of the respondents also felt that deterrence would include stiffer penalties for criminal acts by 2030.

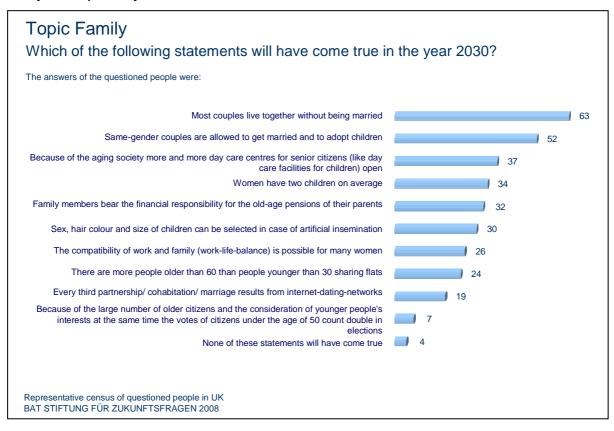
Of course, if we were building a scenario on this dimension using the scenario axis approach, we could also acknowledge that where half the people see increased crime and conflict, and one-third see increased surveillance and national police systems networked globally to address these problems, that the reverse is also true: half the respondents do not think we will see increased crime and conflict, and over two-thirds would reject the assumption that security is more important than privacy and reject the idea that immigrants will cause twice the crime of natives and reject personal "chipping" as a suitable response to personal security worries and increased

surveillance as effective in catching criminals in the act. Unfortunately, rejecting these statements as possibly true in 2030 does little to clarify what forms people think security strategies and conflict resolution will actually take in the next two decades.

#### **Family**

Almost all the respondents rejected the notion that votes will be weighted differently by 2030 in order to more fairly represent the interests of the youthful minority. In contrast, almost two-thirds of respondents agreed that by 2030 most UK couples will live together without getting married – this is simply the continuation of a strong, decades-old trend in the UK.

With regard to two other statements about marriage, however, the responses are divided among the age groups. Between 54% of the 16-34-year-olds, and 60% of the 35-55-year-olds, assume same-gender couples will be able legally to marry and adopt children by the year 2030, but only 42% of the over-55-year-olds do. Homosexuality was only legalised in the UK in 1967, and the oldest respondents would have been educated and socialised prior to its legalisation. A similar age-divide exists between the over-55-year-olds and the two younger age cohorts with regard to the likelihood that marriage or cohabitation could result from relationships begun on-line: only 14% of the oldest group thinks that will be true, whereas over one-fifth of the youth and middle-aged respondents think it will be true. This represents a blow for those pundits who suggest that SecondLife will become everyone's primary life in the decades to come.



Only one-third of respondents feel that prospective parents will practice genetic manipulation of embryos to select gender, hair colour, or other characteristics of children by 2030. It is unclear whether 70% are rejecting that idea because of perceived ethical and value constraints, or technical constraints. Given the UK public's attitudes towards genetic engineering in other arenas, genetic engineering is most likely to be constrained by philosophical distaste. This is another question, however, which far fewer of the oldest respondents found possible (only one-fifth of over-55s thought it would be true) compared to the middle-aged group or youngest group (about one-third each).

The age groups agreed to a greater extent about the number of children: only one-third across all ages thought women would have two children on average. Again, it is unclear from the survey whether the majority of respondents felt that statement was untrue because most women would be having more than two children, or fewer. But no matter how many children women will have by 2030, women will still be over-extended: about 75% of respondents disagreed with the statement that women would be able to achieve work-life balance between career and family.

With regard to care for the aged, the percentage of respondents who believe that 2030 will feature more day care centres for the elderly increases by age group: a little over a quarter of the 16-34-year-olds thinks that is true, and a little over a third of the 35-55-year-olds thinks it is true, whereas nearly half of the over-55 age group think that statement will be true. However, the obverse is worrying: apparently almost two-thirds of the UK population do not think more day care centres will be made available in the future in spite of the UK's ageing society. Most people do not see more over-60s sharing flats in 2030 than under-30s, but of those who do, only 15% of the 16-34-year-olds think it likely, whereas 30% of the over-55s think it likely. It is especially worrying in conjunction with the fact that over two-thirds of respondents do **not** think that families will bear the responsibility of the old age pensions of their parents or grandparents. So by 2030, old age pensioners are essentially unsupported by the state or by their families.

#### **Environment**

Few UK respondents expect any major value, policy, or business shifts on the environmental front at all. The only optimistic note is that almost two-thirds of people surveyed think most trash will be recycled by 2030. Some recognition of the rapid growth of wind and other renewable energy initiatives exists, with about two-fifths of respondents suggesting that solar and wind energy will account for more than half of energy production in 2030. Perhaps that is why two-thirds of people surveyed do not think that energy costs alone will double the cost of a flat.

Generally people seem to take the environment and environmental quality for granted: more than three-quarters assume a plentiful potable water supply and a clean, relatively pollution-free environment – less than a quarter think that pollution could be the number 1 cause of death by 2030. Only a third think city-dwellers might move to the countryside in 2030 to escape environmental impacts in urban centres.

Very few people think that hunger will be eradicated, that climate change problems will be solved, or that humans will be able to exert any control over specific weather events. Yet despite thinking that hunger will still be with us, fewer than one-quarter of respondents think that developing country populations will starve as agriculture shifts from food crops to renewable fuels.

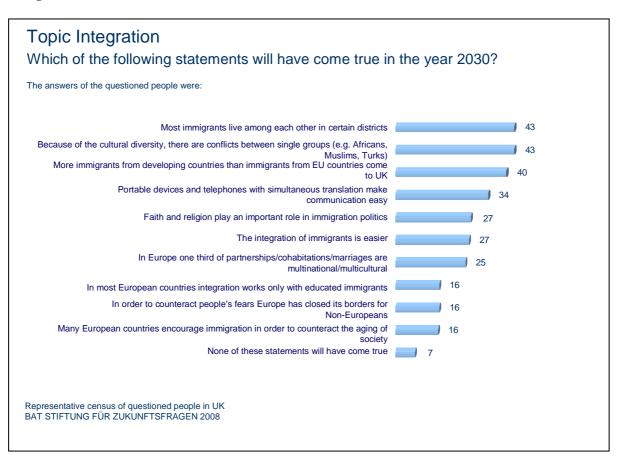
## **Consumption**

The single strongest outcome falls within "Consumption," with 73% of respondents sure that everyday products, including food, will be significantly more expensive by 2030 – looking at the over-50s alone, that response rises to 79%. The economy has been Amazonized – more than half of UK residents surveyed feel that most consumer goods will be purchased online by 2030. That is perhaps because over 80% of respondents feel that low price will still be more important than service and advice in 2030, apt given their assumptions of rising prices. Yet people will still be buying consumer goods outright; only a fifth of those responding thought the consumer economy would switch to leasing instead.

Only a third of those surveyed think that over half of consumer goods will come from Asia, which is consistent with the earlier finding that much of production will continue to be located in developed economies. On the other hand, over 85% assume that most food goods sold in the UK will be imported.

As far as shifting lifestyles and aspirations, only one-fifth of respondents think that by 2030 luxury will mean time and tranquillity rather than material goods; even fewer think the largest part of consumer spending will go towards health. A little over a quarter of UK residents surveyed thought most people would be buying eco-friendly products by 2030, and over 40% think most households will own at least two cars by 2030. People assume that UK consumers will still be in materialist mode, even if they are acquiring their goods online.

# Integration



On questions of social cohesion and integration, over 85% of people surveyed thought it unlikely either that Europe would close its borders completely to immigration, or that it would encourage immigration to counter-act an ageing and diminishing native workforce. Over 85% also rejected the idea that in 2030 integration only succeeds with educated immigrants, which is a positive view. However, only 27% thought the integration of immigrants would actually be easier in 2030, and only a third thought portable phones and other digital devices with simultaneous translation software would be available to make communication easy. Only 43% of respondents thought that in 2030 immigrants would still be living with each other in distinct community enclaves, and only 43% assume that conflicts will erupt among immigrant groups within British society. The fact that almost 60% assume greater inclusion and integration and less conflict is a positive view for communities. But UK respondents are less optimistic about integration at the individual level, with only a quarter of respondents assuming that a third of European partnerships or marriages will be multicultural by 2030.

Three-quarters of those responding disagreed that faith and religion will play an important role in immigration politics in 2030. Sixty percent disagreed that more immigrants will come from developing countries rather than from the EU. Taken together, these two assumptions might imply that UK residents foresee a trend of economically-driven immigration.

# Summary: Strongest Working Assumptions re: the UK in 2030

A key fear is that the economy will fail loyal workers in the future: the have-have not gap will increase, salaries will be insufficient to assure retirement savings, old-age poverty will grow – or work/life balance will suffer as people take extra jobs in an attempt to provide for their senior years. Few people see the education infrastructure as dynamic enough to produce a renewal of skills and a revitalization of the workforce that might generate increased income and greater economic stability for the middle class.

Crime and conflict are chief concerns, and increased surveillance one response. Organised crime expands and goes digital, and resource conflicts -- oil and water wars – erupt. A few people are more likely to assume strangers are the cause of crime, and more likely to acquiesce to digital surveillance – both external and embedded – in order to allay their fears and suspicions.

Family life in the UK will continue its path of secularization, but slowly: the current strong trend toward individual households, or unmarried couples forming households, will continue. No radical shifts will occur into "alternative lifestyles" such as the legalisation of gay marriage or the advent of digital marriages or the genetic engineering of children. What will continue is the stress on women to balance work and family life, and concerns about the expanding population of old age pensioners, who will lack public support, and whom the younger generations will be too poor to support.

While a few behaviours embodying a shift toward environmental values will be evident in 2030 – primarily cradle-to-grave recycling – major infrastructural shifts to sustainability will be few and far between, with some slight progress seen in renewable energy sources. For the most part, people seem to take environmental resources and environmental quality for granted. With regard to the big challenges –

global climate change and hunger – UK residents are not optimistic about solutions arising in the next twenty years.

Consumers will be net-savvy digital customers on the hunt for low prices in an economic context of rising costs for goods. Most of those goods will be sourced internationally, but not necessarily from Asia. Generally, UK respondents seem to feel that two decades is too short a time for significant value shifts away from materialism, with little emphasis on eco-friendly goods, health and services, or a spiritual and wellness interpretation of "luxury."

Integration and social cohesion will still be a struggle, with policies regarding immigration remaining essentially the same – neither discouraging nor encouraging greater immigration. More people assume that economic imperatives will drive immigration rather than faith. A narrow majority see 2030 as a time when immigrant communities will be more thoroughly integrated into UK communities and tensions and conflict less likely.

## **Implications**

To what extent are these results coloured by gender or life-stage? To what extent have they been coloured by respondents entering what Alister Darling is calling Britain's worst economic downtown in 60 years?<sup>52</sup> The survey results seem to reflect people's worst fears about the future rather than emerging opportunities or best hopes.

Is that lack of positive vision actually a sign of pessimism – or is it a lack of knowledge about emerging innovations, shifting paradigms, and new and visionary worldviews that could fundamentally transform possibilities for humanity and the planet over the next two decades, if only we recognise and grasp the opportunities they represent? The question we need to explore, as futures researchers, is the relative psychological weight of fears and negative assumptions about the future: do they outweigh positive assumptions? Many would argue that negative images of the future are useful as self-defeating prophecies: they spur people to preventive action. But do actions taken to defeat a negative create as positive a future as transformative actions created to embody community ideals?

This survey provides an interesting starting point for considering assumptions about the future across Europe, and to compare assumptions among Europe's diverse cultures. Its greatest value will be in cross-cultural comparison and in cross-temporal comparison: the results will be both more meaningful and more useful if collected at regular intervals over time, in order to track the emergence and collapse of different patterns of assumptions, values, and worldviews regarding the future. With continued interest and support, we may have the luxury of such a time-series database by 2030. Until then, these results serve to indicate areas where we face particular challenges as UK and European residents, both in acknowledging the possibilities of change, and in envisioning positive change.

http://www.guardian.co.uk/politics/2008/aug/30/economy.alistairdarling.

<sup>&</sup>lt;sup>52</sup> Watt, Nicholas. "Economy at 60-year low, says Darling. And it will get worse." The Guardian (electronic version), retrieved Saturday, 30 August 2008 at:

#### U.K.: The UK Response

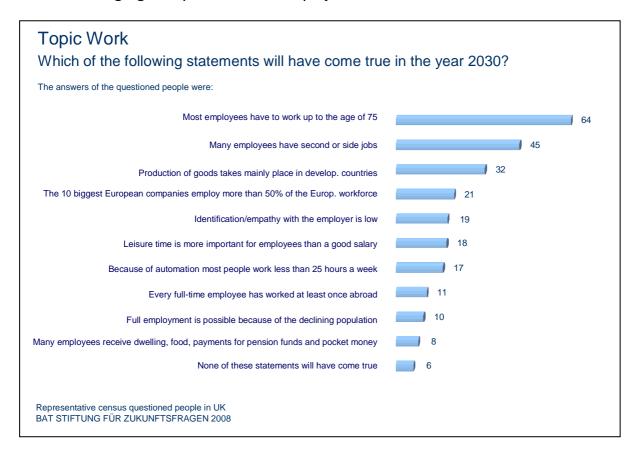
Rohit Talwar

#### Introduction

In this chapter we explore the answers to the UK respondents to the eight sets of issues covered in the survey – work, relationship between poor and rich, education, security, family, environment, consumption and integration.

#### Work

In this section, the questions explored three broad dimensions of work – the nature of business, aging and pensions and employment.



#### **Business**

Despite mainstream expectations that average western salaries will outstrip those in the developing world till at least 2050, only 32% expect the production of goods to take place mainly in developing countries by 2030. This could be down to an expectation of rising protectionism in national economies, production being returned to local markets to reduce environmental footprints, quality issues, shareholder pressures or some combination of these factors. Only 10% believe full employment will be possible because of the declining population. This may be beacuse they don't see full employment as a realisitic possibility, more likely it is

because most expect the UK population to grow not contract – current estimates are that it should rise from approximately 61 million<sup>53</sup> today to 67 million by 2050<sup>54</sup>.

## Ageing and Pensions

The research highlights growing recognition of increasing life expectancy and the need to rethink our long term pension planning. Fully 64% of all respondents and 67% of females said they expected that by 2030 most employees would have to work up to the age of 75. Average life expectancy in the UK is now approximately 78.9 (76.4 for men and 81.5 for women)<sup>55</sup> and is rising by approximately five months per year. Some actuaries are suggesting that if you are under 50 you have a 90% chance of living to 100 and advances in genetics are leading some in the field to suggest life expectancy of 120-150 could be achieved by 2030. The big questions surround how society will adjust to lengthening lifespans, the impact on family structures of 90 year old children still having responsibility for 110 year old parents and the impact on resource demand and prices. There is also a major issue of how organisations will cope with managing four or five generations in the workplace with their different preferences and attitudes to working styles, communications, technology usage and work-life balance.

## **Employment**

The answers to the various questions on employment suggest that respondents may not be hearing all of the forecasts about Europe's changing fortunes and may also not be 'connecting the dots' on the signals they are seeing. There's also little expectation that the UK will experience a long term negative impact from the current economic woes and long terms trends towards rising wealth in the developing world. For example, despite concerns over funding retirement, only 45% of all respondents expect many employees to have second or side jobs – although there is a marked difference between females (51%) and males (39%).

A total of 21% expect that the 10 biggest European companies to employ more than half of the European workforce– suggesting that we don't expect full consolidation in every sector . Far more of the 35-54 age group (26%) see it as possible compared to 16-34 year olds (16%) – highlighting the growing willingness and desire of the latter to work in smaller firms or even start their own.

Few expect investment in automation to yield the promised payback in shorter working hours – only 17% of all respondents and just 10% of 16-34 year olds agree that because of automation most people work less than 25 hours a week. The over 55's are slightly more optimisite on this issue (26%). However, most expect the 'social contract' between employee and employer to remain strong with only 19% suggesting that indentification / empathy with the employer will be low.

There is also little expectation of siginifcant change in the core values of workers, work-life balance and reward mechanisms. Only 18% suggest that by 2030 leisure time will be more important for employees than a good salary. Although the

<sup>53</sup> https://www.cia.gov/library/publications/the-world-factbook/geos/uk.html

http://www.un.org/esa/population/unpop.htm cited in http://www.brusselsjournal.com/node/1982

<sup>55</sup> https://www.cia.gov/library/publications/the-world-factbook/geos/uk.html

percentage does rise with age – while only 15% of 16-34 year olds agree, the figure rises to 19% for 35-54 year olds and 21% for the 55+ age group. Despite media attention on the rise of emerging markets and continued globalization, only 11% believe the by 2030 every employee will have worked abroad at least once. On rewards, only 8% expect that many employees will receive dwelling, food, payments for pension funds and pocket money for their disposal instead of a salary.

#### Relationship Between Poor and Rich

This section focused on the nature and distribution of personal wealth in the UK and the scale of global inequality.

#### Personal Wealth

Although almost two thirds (61%) expect the gap between rich and poor to widen in the UK, they don't necessarily equate life expectancy with income or wealth – hence only 40% expect the life expectancy of the rich to be significantly higher than that of poor people. Only 25% expect the UK middle class to have dissapeared. Interestingly The Brookings Institute estimates that 'the middle class in poor countries is the fastest-growing segment of the world's population. While the total population of the planet will increase by about a billion people in the next 12 years, the ranks of the middle class will swell by as many as 1.8 billion – 600 million just in China.' It forecasts that by 2020, the world's middle class will grow to include 52% of the total population, up from 30% now. The middle class will almost double in the poor countries where sustained economic growth is fast lifting people above the poverty line' <sup>56 57</sup>. It is estimated that half of India's population could be 'middle class' within a few decades and that India's individual purchasing power will climb from \$2,149 in 1999 to \$5,653 per person by 2020 — and \$16,500 by 2040<sup>58</sup>.

One of the biggest concerns for society is the expected level of unment need amongst older people. Perhaps not unsurprisingly given that two thirds expect to work to seventy-five, 55% expect that many employees will not earn enough to save money for retirement and 50% believe old age poverty will remain an unsolved problem. Given declining birth rates, rising life expectancy and the growing importance of the over 50's at election time, this is a cohort that government will ignore at their peril.

# Global Inequality

The UK respondents don't seem to have been overly influenced by all the talk about the rise of BRIC (Brazil, Russia, India and China), suggestions that China's gdp could overtake the US by 2015 and the growing interest in the next 11 (N-11) emerging economies that have promising outlooks for global investors and could become top 20 economies by 2025 - namely – Bangladesh, Egypt, Indonesia, Iran, South Korea, Mexico, Nigeria, Pakistan, Philippines, Turkey and Vietnam<sup>59</sup>. Only 20% expect the

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<sup>&</sup>lt;sup>56</sup>http://www.investopedia.com/articles/07/global\_trends.asp

http://www.foreignpolicy.com/story/cms.php?story\_id=4166
 http://www.theglobalist.com/DBWeb/StoryId.aspx?StoryId=2195

<sup>59</sup> http://en.wikipedia.org/wiki/Next Eleven

gap between industrialised nations and developing economies to have reduced by 2030.

#### Wealth Redistribution

The responses paint a picture of a conservative respondee base with little expectation of real change in income distribution or social opportunity from today. Only 7% expect the rewards of top managers to have declined, and just 17% believe that government will guarantee a minimum income for all – independent of age, gender, origin, etc. However it's not clear whether this is because people think it won't be a policy priority or because they don't believe we'll have the financial resources to provide such guarantees to the citizenry. Only 15% believe that the UK will have educational programs that provide children from common (poor?) families with the same educational opportunities those from 'academic' families. Furthermore only 15% believe that by 2030 the higher the income, the more children the English will be able to "afford".

#### **Education**

This section explores the nature and structure of the education systems and the impact of individual development and opportunity.

## The Education System

The general expectation of the majority of UK respondents is of little real change in the education system and little progress on educational performance in the period to 2030. The most optimistic response was around better alignment between women's educational attainments and the resulting opportunities to break the 'glass ceiling' to achieving seniority in business. Even so, it is still a rather damming perspective on the potential for progress in the UK that only 47% believe that by 2030 more and more highly qualified women will assume leading management jobs.

Languages have always proved a barrier for the British and only 44% expect that most Europeans will speak at 2 languages fluently by 2030. This could be a major barrier for UK citizens in an increasingly globalised economy where by 2030 it seems likely that they could just as easily be working for an employer from China, India or the Middle East as from Europe or the US.

Despite all the clamour for educational reform and the adoption of proven approaches such as online delivery, accelerated learning, special needs tuition and gifted pupil programs, the majority of UK respondents have little expectation that these will have real impact on the basic educational model in existence today. Despite the dramatic rise in the take up of online education globally – particularly in Asia, only 33% believe online lectures will be given simultaneously by the best professors at different universities.

Although there has been major growth in enrollments in UK fee paying schools in recent years, less than a quarter (24%) believe that there will be more private schools than public schools in the UK. Few expect enhanced provision for the most able – only 23% believe we will see a system to detect special abilities to develop children starting at kindergarden level. Furthermore few expect a big shift in the nature of delivery channels - only 18% beleive the media will be responsible for 1/3 of

education and will broadcast special education programs for this purpose. Finally, the majority expect the bulk of responsibility for inidividual education to stay within the mainstream schooling system. Indeed, only 19% feel that informal education (e.g. self-development) will be more impotant than formal education (e.g. school education).

# **Education and Opportunity**

Recent years have seen a profileration of new job roles from web designers, information architechts, nan-engineers and cultural curators. However, only 30% of UK respondents believed that one-fourth of young employees would work in professions that did not yet exist in 2008. Interestingly the firgure is even lower amongst the 16-34 age group (22%) as compared to the 55+ cohort (36%). Furthermore only 26% expect talent scouts for big companies will look for new recruits in elementary schools. In practice, there has been a dramatic growth of corporate involvement in the schooling system, for example Intel spends more than \$100 million annually to educate more than 4 million teachers in 35 countries about how to incorporate technology into lesson plans. 60

In the workplace, although 70% of the valuation of public companies is based on their talent pool and intellectual property, and ignoring the rhetoric about people being the greatest asset in business, few UK respondents expect this to be translated inbto increased investment in trainingh and development. Just 25% believe that at least one further training opportunity per year will be provided as standard for each employee.

# Security

# Threat Perception

The nature of a survey such as this requires people to take a point view on issues and as such the perception is that the majority of respondents may have been extrapolating current problems into the 2030. 56% of all respondents believe that organised crime will be a big problem with 66% of the 55+ age group expressing this concern against 41% of 16-34 cohort. Similarly 56% believe that internet crime will have increased very much. The figure was lower amongst 16-34's (49%) as compared to the 35-54 group who had the highest level of concern (60%). In practice, the reality is that we may be on version 3.0, 4.0 or 5.0 of the internet by 2030 and it could look very different to today - possibly with far higher levels of restriction, monitoring and control of how individuals use the web.

The survey was undertaken prior to the Russian invasion of Georgia in August 2008 – which has heightened global sensibilities and concerns about the potential for a resource based conflict. One would imagine that the responses to the next question might have been been different had it been conducted during or after the war. 53% of participants felt that in 2030 warlike conflicts would take place over natural resources such as oil, gas and water. Given the concerns of the 2007 Stern report on climate change that 1 in 6 of the world's population could face acute water

<sup>60</sup> http://www.microsoft.com/education/schooloffuture.mspx

shortages<sup>61</sup>, there seems significant potential for water to be a key source of future conflicts.

Domestically, despite the media focus and perpetuation or urban myths about migrants as a source of increased crime, only 31% said that by 2030 the crime rate of foreigners / immigrants would be double that of natives. Throughout the survey, the majority of UK respodents reflected relatively low expectations about the potential for scientific and technological advances – this was equally true when it came to their perception of how such advances might be deployed to create new security threats. Only 22% said that new technologies like bi- or nano-technologies would turn out to be more dangerous than expected in 2008.

# Personal Security

Most depictions of the future on a 2020-2030 timescale portray a world with higher levels of state sponsored surveillance and control of the individual in return for lower crime, civic order and domestic security. In practice, despite the threat perceptions mentioned above, the majority of UK respodents still placed matters of personal freedom and privacy above security considerations. Only 32% said that by 2030, for many people, security would be more important than their own privacy. Similarly, only 31% felt that many people would wear a chip for identification and localisation. The figure was higher at 36% for the 16-34 age group and lower for the 55+ cohort at 25%. This suggests that future generations may be more willing to accept such measures – possibly beacuse they could also see the chip being used to perform all of the functions of a credit card, passport, wallet, identity card and health record combined.

## Prevention and Detection

Again the majority had fairly limited expectations about the advances that would be made in measures to prevent, capture and deter offenders and recidivists. Only 32% expect that surveillance cameras will be able to identify many criminals directly when committing a crime. Even fewer at 19% expected that European / international data transfer would help to solve crime faster and enable people to feel more secure than in 2008. Finally, just 27% expected the state to repsond by imposing higher penalties for committing criminal acts.

Although not raised as a specific question or scenario in the survey, one interesting possibility that emerges when reading across the sections is that of older, poorer citizens, struggling to fund their retirement and increasingly turning to crime. If the expectation is that detection rates will be low and that an overburdened state will lack the financial ability, resources and willingness to pursue every case even if the culprit is appreheneded, the risk reward equation may seem sufficiently attractive to encourage people to break the law with increasing frequency.

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Family Structures

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<sup>61</sup> http://news.bbc.co.uk/1/hi/business/6096084.stm

One of the most surprising results was the implied decline of marriage as an institution despite the current downturn in the number of divorce cases and the sustainability of mariage as an institution in different forms over the centuries. 63% of all respondent and 66% of 16-34 and 35-54 year olds felt that by 2030 most copules would live together without being married. Unfortunately we get no insight into what the drivers are for this – whether it be a mere fashion trend, declining religoious influence in society, work-life balance pressures, a delay in having children, a reduced sense of commitment across society or a straightforward economic choice. Despite changing social structures, work-life balance pressures and the rising popularity of social networks – with some forecasting 387 million users by the end of 2008 and 1 billion by 2012<sup>62</sup> - only 19% of respondents expected that every third partnership / cohabitation / marriage would result from internet dating networks.

The majority (52%) expected same-gender couples to be allowed to get married and adopt children -with an interesting split between an apprently more liberal female (56%) than male (47%) respondent base. Only 34% expected women to have two children on average – it is assumed that majority felt that the average would be lower – possibly for similar reasons to those cited for the expected decline in marriage. For those that do have children, only 30% believe by 2030 the sex, hair colour and size of children could or would be selected through aritificial insemination. Work-life balance issues are implicit in many of the other selections made and were explicitly addressed in one question. Only 26% felt that the compatibility of work and family (work-life balance) would be possible for many women. Although the figure was slightly higher for females (28%) than males (23%), this combined with the earlier response about women breaking through the glass ceiling paint a damming picture of our belief in soicety's ability to break free from male dominated structures, value sets and governing paradigms.

# The Ageing Challenge

The ageing of our citizenry and how society copes will be an increasingly dominant theme of the next two to three decades. The unprecedented rate of increase in life expectancy is putting strains on the pensions system, healthcare provision, housing supply and family structures. The increasingly powerful voice of the grey vote is infleuncing government decision making and could increasingly result in resources being diverted away from other areas of society – particularly children and young people.

Whilst acknolwedging the ageing issue and the resulting pensions challenge in earlier questions, the majority of UK respondents showed little expectation of major developments to accommodate what is effectively a seismic change in the structure of society. Only 37% expect that because of the aging society, more and more day-care centres would open for senior citizens (like day-care facilities for children). Those getting closer to retirmenet in the 55+ cohort ranked this higher at 46%, while it only gained support from 28%.of the 16-34 year olds.

Despite earlier concerns about funding retirment, just 32% expect family members to bear the financial responsibility for the old-age pensions of their parents / grandparents. While we got no insight into how the retired might fund any shortfall,

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only 24% expected that financial hardship or the need for companionship would lead to more people over the age of 60 than those younger than 30 sharing flats. What would be interesting to see is where the majority would see the over-60's living. Is the assumption that they will live amongst their children and grandchildren or move to retirement homes and, if so, who would fund this?

Given the increasing voting power of the over 50's, it was interesting to see that the vast majority of UK respondents didn't think that anything would be done about it. A mere 7% said that by 2030, because of the larger number of older citizens and the consideration of young people's interests at the same time, the votes of citizens under the age of 50 would count double in elections.

#### **Environment**

The environment is comnig under increased strain from population growth and rising wealth driving higher consumption levels. The UN projects a global population of 8 billion by 2025 and 9.2 billion by 2050, up from 6.6 billion today63. Meanwhile, hundreds of millions of people in emerging economies are experiencing rising incomes and longer life spans - driving up food consumption, increasing demand for clean water and energy, and placing increased pressure on all natural resources. The Worldwide Fund for Nature's (WWF) Living Planet Report says human populations are using up Earth's natural resources at a rapid rate. WWF estimates that if current consumption levels continue we will require two planets' worth of raw resource supplies in the next 40 years. If global consumption levels rise to match those in Europe, three planets would be required and if consumption rose to US levels, five planets would be needed<sup>64</sup>.

At the same time, the risk of dangerous climate change has entered the public psyche. There is still vigorous debate amongst scientists, politicians and economists about the causes of and solutions to climate change. However, there is also growing consensus that human induced climate change is a moral, environmental, political and economic priority for governments, organizations and citizens. Current levels of carbon dioxide and methane in the atmosphere are higher than at any time in the past 650,000 years. A 5-10 percent increase in hurricane wind speed, linked to rising sea temperatures, is predicted to approximately double annual damage costs in the US to \$150 billion by 2017<sup>65</sup>.

The 2007 UK Stern report on the economic impact of climate change, suggests that one percent of global GDP (gross domestic product) must be spent on tackling climate change immediately. It warns that if no action is taken, floods from rising sea levels could displace up to 100 million people. Concurrently, drought could create tens or even hundreds of millions of climate refugees, while melting glaciers could cause water shortages for one in six of the world's population. Global warming has the potential to cut worldwide food production by 20% and worldwide income from agriculture by 16% by 202066.

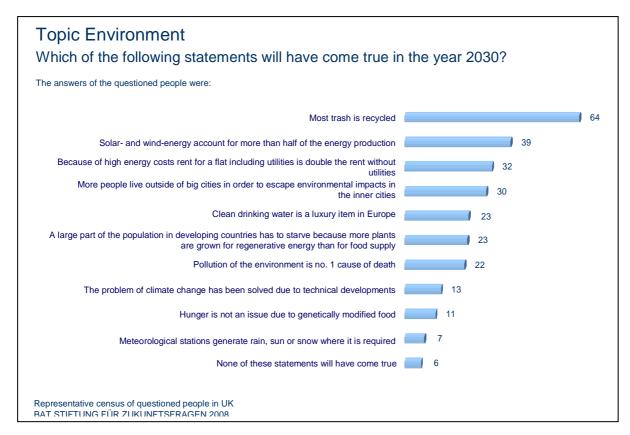
http://www.dailymail.co.uk/pages/live/articles/news/news.html?in article id=41345 1&in\_page\_id=1770

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<sup>63</sup> http://www.un.org/popin/data.html

<sup>64</sup> http://www.naturalnews.com/020873.html

<sup>66</sup> http://news.bbc.co.uk/1/hi/business/6096084.stm



Stern suggests the economic impacts of unabated climate change could cost the world 5% of GDP per year. However, the report argues that shifting the world onto a low-carbon path could eventually benefit the global economy by \$2.5 trillion a year. By 2050, markets for low-carbon technologies could be worth at least \$500 billion <sup>67</sup>.

#### Behavioral and Techincal Solutions

Despite the growing understanding of the need for a more sustainable way of life and of the risks of dangerous climate change, UK respondents held little hope of significant progress in delivering technical solutions to the challenges we face. The one area of optimism was a behavioural change where 64% expected that by 2030 most trash would be recycled. In contrast only 39% expect solar and wnd energy to account for more than one half of energy production and only 13% expect the problem of climate change to have been solved through technical developments. Even less expect more radical breakthroughs – with just 7% believing that meteorological stations would be developed that could generate rain, snow or sun wherever they are required.

#### Social and Economic Impacts

The majority of UK respondents also seemed to believe that the risks are being overstated. Only 32% feel that, as a result of high energy costs, the rent for flats with utilities would be double that of those without utilities. Despite constant warnings about locations at high risk of flooding and uninsurable post codes, villages and towns, few expected environmental considerations to have a significant impact on

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<sup>67</sup> http://news.bbc.co.uk/1/hi/business/6096084.stm

lifestyle choices such as where to live. Only 30% believe that more people will live outside big cities in order to escape the environmental impacts in the inner cities. Only 23% believe that the availability of clean drinking water will become such an issue that it is considered a luxury item in Europe. Similarly, only 22% believe that pollution will be the no. 1 cause of death and just 23% expect that a large part of the population in developing countries will have to starve because more plants are grown for regenerative energy than for food supply. Finally, continuing the theme of a lack of faith in science and technology, only 11% believe hunger will not be an issue due to genetically modified food.

## Consumption

Continuing the response pattern across all of the categories to date, the majority of UK respondents expected little real change in terms of productions systems, consumption patterns and influences on buying behaviour. The two most notable exceptions were that 73% expect everyday products (e.g. food) to be siginifacantly more expensive and 53% expect most consumer goods to be purchased online e.g. via the Internet.

## Buying Behaviour

Car ownership is expected to remain strong with 42% believeing that most households will own at least two cars. This in itself poses an interesting challenge, in terms of resource consumption. In the UK today, there are approximately 545 cars for every 1000 citizens – contrast this with India where the figure is approximately 10 cars for 1000 of it's 1.15 billion<sup>68</sup> citizens. For India to attain the same levels of car ownership as the UK would suggest it could have over 615 million cars on the road – a simply unimaginable figure and inconceivable concept. However, India's launch of the US\$2,500 Tata Nano <sup>69</sup> as the world's cheapest car has raised consumer expectations about what they can afford and bought with it the spectre of mass car ownership on an unheralded scale.

Despite the focus on sustainability, only 28% expect most people to buy eco-freindly products (green products). Where luxury is concerned the majority appear to equate it with brand image, quality, price and functionality rather than interpreting luxury to imply more spiritual values such as time and tranquility (20%). Given the growing debate about healthcare funding, increasing life expectancy, rising concerns over the nation's health and lifestyle conditions such as obesity, only 16% expect the biggest part of consumer expenditure to be spent in the health sector. Finally, only 13% expect that service and advice will be considered more impotant than a low price.

## **Product Sourcing**

There seem to be some inherent contradictions in the choices made by the majority on the issue of sourcing. On the one hand, only 34% believe that more than half of all products will come from Asia. This could be due to a belief that production will have shifted to other low cost regions e.g. Africa, or environmental factors and a

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<sup>68</sup> https://www.cia.gov/library/publications/the-world-factbook/geos/in.html

<sup>69</sup> http://news.bbc.co.uk/2/hi/business/7180396.stm

desire to reduce transport miles. It may also be down to a desire to source locally and support domestic manufacture or it may be down to expectation of rapid advances in manufacturing technology that lead to economically viable small footprint factories producing to meet the demands of local markets. However, the same reasoning doesn't seem to apply to food – where only 13% expect most food products to be produced domestically.

#### Integration

Although immigration is a 'hot topic' in the UK today with the debate raging about the economic and social impact of migrants, the responses suggest that the majority of UK participants expected little real change in immigration policy or the behaviour of migrants in the period to 2030. In practice, migration will have to become a core policy issue for future governments. Current estimates suggest that the bulk of the expected six million growth in the UK population will come from inward migration. This coupled with significantly higher birth rates amongst some immigrant communities will change the ethnic mix of the UK quite markedly. In the survey, a total of 40% believe that more immigrants will come from developing nations rather than EU countries.

## Immigration Policy

Among the respondents, only 27% agree that faith and religion will play an important role in immigration politics. Few expect drastic action either to prevent or encourage migration - Just 16% say that in order to counteract people's fears, Europe will have closed its border to Non-Europeans. Furthermore only the same percentage expect many European countries to encourage immigration in order to counteract the aging of society.

#### Integration of Migrants

Overall, only 27% believe the integration of immigrants will be easier. Although it has been common for migrants to move to areas where there are existing concentrations of fellow nationals, this is not expected to be the way the majority will behave. Only 43% say most immigrants will live amongst each other in certain districts. The most optimistic on the integration front are the 16-34 cohort at 36% against the least optimistic among the 55+ age group at 51% - who may be relying more on past experience to suggest how they see the future playing out. Cultural diversity is expected to lead to conflict between single groups (e.g. Muslims, Africans, Turks) by 43% - falling to 35% for the 16-34 age group and rising to 47% for the 35-54 and 55+ cohorts.

At the social and cultural level, there was little expectation of true integration – with only 25% believing that in Europe one third of partnerships / marriages / cohabitations would be multinational / multicultural. Roughly a third (34%) expect technology to help through portable devices and telephones with simultaneous translation to make communications easier. A further 16% believe that in most European countries integration would only work with educated immigrants. Hopefully this is an indication that the majority believe it can work with immigrants at all levels of education.

#### **Conclusions**

Viewed in total, the UK responses paint a relatively bleak picture on most fronts. The majority hold out few expectations for globalisation to truly benefit the developing world or to deliver full employment at home. An aging society leaves many expecting people to have to work to 75, with half expecting people to face financial hardship and only a third expecting families to step in and help. The gap between rich and poor is expected to grow and there is also little expectation for changes in the nature of work or the motivations of and rewards for employees.

In education there is little expectation for changes in the structure of the system or of a major increase in online education, gifted pupil support, private schooling or new delivery channels. Few also expect o see higher investment in workplace training and development. On security, the majority had concerns about organised crime, internet crime and interstate conflict over natural resources. However the majority were unwilling to trade personal freedom and privacy for higher levels of security. There was also litle expectation of siginificant advance is prevention and detection mechanisms.

For family, the majority expectation is for a decline in marriage, an increase in same sex maiage and fewer women having two children. The issues of an aging society are recognised but few expect real policy or behavioural change to address the challenges. On the environment, while there is an expectation of increased recycling, there is little general hope of technical solutions to the problems of cliame change, energy or feeding the population. There is also a sense that the risks of environmental degradation, hunger and pollution may be overstated.

On consumption, the majority expect basic goods (e.g. food) to be significantly higher and the bulk of consumer goods to be purchased online. Otherwise there is little expectation for signifianct change in consumer behaviour or greater ecopurchaisng. On the sourcing front, interestingly, the majority expect most basic foodstuffs to be imported whilst the bulk of consumer goods would be manufactured locally. Finally, on integration there was little expectation of any real progress either on immigatrion policy or on efforts to imprve integration at the community level.

In general the UK respondents held out little expectation on most fronts, with the majority seeing no real progress in tackling the major issues of the day. One of the biggest areas of concern is the mismatch between government policy and public expectation in the area of science and technology. At present UK government is placing a strong reliance on technical solutios to tackle issues as diverse as the ennvironment, climate change, crime, hunger and educational need. However the survey showed that only a minority expected to see technology providing true solutions in these areas.

In many respects, the responses were a typically British combination of understating the impact of forthcoming issues combined with low expectations for change and progress. As a futurist, one can only hope that UK society and government can raise their understanding of the scale of change we are facing and give themselves permission to believe that many of the solutions are in our own gift.

**METHODS AND SURVEY PERIOD** 

The methods used by the BAT Stiftung für Zukunftsfragen are based on scientific

facts and findings. All data pertain to a representative sample of all private

households. For implementation purposes the questions were compiled in an

omnibus survey, which is a tried-and-tested market research method. Representative,

population-based samples were surveyed at regular intervals, whereby a different

respondent was chosen on each occasion to rule out panel effects. Face-to-face

interviews were conducted by GfK EURO BUSSES®, i.e. the interviews were

conducted with the respondents in their own households. The survey was

implemented in Austria, Germany, Finland, France, the United Kingdom, Italy, Spain

and Switzerland using CAPI (Computer Assisted Personal Interviews), and in Russia

with PAPI (Paper & Pencil).

The field work was managed and supervised by our partner institute, GfK. All

interviews were checked upon return. Systematic mistakes were ruled out by

automated checks.

*No. and representativeness:* 

Russia 2,100 respondents aged 16+, Germany

2,000 respondents aged 14+, all other countries

1,000 respondents aged 15+

Survey period:

June - July 2008

Partner institute:

GfK Marktforschung

**REPRESENTATION** 

If added percentages deviate +/- from 100, this is due to rounding differences. When

considerable deviations exist, it has to be taken into consideration that multiple

responses were possible, making the value higher than 100.

The life phases shown in the tables section are grouped as follows:

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#### **PERIODS OF LIFE**

Adolescents: 14 - 17 years

Young adults: 18 – 24 years

Singles: 25 – 49 years

Couples: Households with two adult persons (25-49 years)

without children under the age of 14 years

Families with children: Households (25-49 years) with children aged under

14 years

Best agers: 50 - 64 years

Pensioners: 65+

**TABLE APPENDIX** 

### **Survey Results**

### All European Results

Work Question: What do you think, which of the following statements will have come true by the year 2030?	average (weighted)	Austria	СН	Finland	France	Germany	Italy	Russia	Spain	UK
Many employees have second or side jobs	50	63	71	55	74	78	31	34	48	45
Most employees have to work up to the age of 75	41	43	45	45	56	49	38	23	37	64
Production of goods takes mainly place in developing countries	31	43	52	48	51	48	24	18	23	32
The 10 biggest European companies employ more than half of the European workforce	23	24	34	25	43	24	9	20	23	21
Identification/empathy with the employer is low	21	29	42	37	32	39	9	12	20	19
Because of automation most people work less than 25 hours a week	20	12	19	25	29	14	14	24	22	17
Leisure time is more important for employees than a good salary	19	14	28	48	29	12	14	20	22	18
Full employment is possible because of the declining population	16	12	26	27	19	17	13	20	12	10
Every full-time employee has worked at least once abroad	15	18	29	19	36	14	7	9	17	11
Many employees receive dwelling, food, payments for pension funds and pocket money for their disposal instead of a salary	13	9	14	14	22	12	11	12	14	8
None of these statements will have come true	8	12	2	5	3	4	15	13	11	6

Relationship between poor and rich Question: What do you think, which of the following statements will have come true by the year 2030?	average (weighted)	Austria	5	Finland	France	Germany	Italy	Russia	Spain	UK
The gap between poor and rich has become wider in (country)	57	67	75	71	75	82	39	42	49	61
Old age poverty is an unsolved problem	52	58	76	48	76	76	29	38	55	50
Many employees do not earn enough to save money for retirement	49	56	69	56	80	75	32	23	52	55
Life expectancy of rich people is much higher than life expectancy of poor people	37	40	49	53	62	57	19	20	38	40
The middle class has almost disappeared	35	56	68	24	48	68	31	18	25	25
The gap between industrialised nations and developing countries has become smaller	31	9	25	25	39	16	13	17	17	20
The government guaranties a minimum income for all – independent of age, gender, origin etc.	20	21	29	31	33	21	8	21	14	17
The higher the income the more children the (inhabitants of country) are able to "afford"	18	10	22	31	30	14	4	22	17	15
Educational programs provide children from common families with the same educational opportunities as children from academic families	16	13	28	37	36	15	8	12	17	15
The income of top managers has declined	10	8	29	14	19	11	11	7	11	7
None of these statements will have come true	5	9	1	2	2	2	12	6	7	5

Education Question: What do you think, which of the following statements will have come true by the year 2030?	average (weighted)	Austria	5	Finland	France	Germany	Italy	Russia	Spain	UK
More and more highly qualified women assume leading management jobs	45	48	75	74	78	60	27	23	54	47
Most Europeans speak at least 2 languages fluently	40	48	71	63	68	48	31	22	49	44
One fourth of the young employees work in professions which did not yet exist in 2008	38	37	51	45	59	49	24	34	34	30
There are more private schools than public schools in (country)	34	24	38	22	38	32	25	42	28	24
Online-lectures are given simultaneously by the best professors at different universities	33	29	56	54	61	40	18	23	30	33
At least one further training per year is standard for each employee	31	34	52	41	62	36	25	24	16	25
A system to detect special abilities develops many children starting already in kindergarten	30	25	49	37	51	41	12	27	22	23
Talent scouts look for new recruits for big companies already in elementary schools	22	20	41	44	30	25	8	23	17	26
Media are responsible for 1/3 of education and broadcast special educational programs for this purpose	21	15	32	23	43	24	13	16	19	18
Informal education (e.g. self- development) is more important than formal education (e.g. school education)	18	18	31	31	36	22	10	12	16	19
None of these statements will have come true	8	16	1	3	4	6	17	8	10	7

Security Question: What do you think, which of the following statements will have come true by the year 2030?	average (weighted)	Austria	5	Finland	France	Germany	Italy	Russia	Spain	UK
Organised crime is a big problem in all European countries	49	58	73	67	63	68	32	35	47	56
Warlike conflicts about natural resources like oil, gas or water take place	47	46	65	65	67	57	28	38	42	53
Internet related crime has increased very much	45	54	77	79	64	67	20	29	45	56
Penalties for criminal acts are higher	38	38	58	40	59	43	26	34	37	27
Surveillance computers identify many criminals directly when committing a crime	35	27	55	55	63	38	18	31	33	32
For many people security is more important than their own privacy	31	28	36	50	47	32	21	28	31	32
The crime rate of foreigners / immigrants doubles the crime rate of natives	30	43	54	36	35	43	26	17	37	31
New technologies like bio-or nano- technologies are more dangerous as expected in 2008	27	22	40	33	49	28	13	28	22	22
European / international data transfer helps to solve crime faster, people feel more secure than today	24	29	49	31	49	35	12	14	20	19
Many people wear a chip for identification and localisation	24	19	34	45	47	23	16	15	26	31
None of these statements will have come true	5	9	1	2	3	2	12	5	7	3

Family Question: What do you think, which of the following statements will have come true by the year 2030?	average (weighted)	Austria	5	Finland	France	Germany	Italy	Russia	Spain	UK
Most couples live together without being married	60	68	77	68	82	70	51	45	61	63
Same-gender couples are allowed to get married and to adopt children	42	43	66	67	72	55	23	21	52	52
Because of the aging society more and more day care centres for senior citizens (like day-care facilities for children) open	38	41	56	49	71	52	21	24	36	37
The compatibility of work and family (work-life-balance) is possible for many women	34	31	64	51	56	41	14	32	29	26
Women have two children on average	32	19	40	46	65	20	12	32	35	34
Every third partnership/ cohabitation/marriage results from internet-dating-networks	30	27	58	40	62	40	20	21	21	19
Family members bear the financial responsibility for the old-age pensions of their parents/grand parents	28	27	32	21	41	38	23	18	26	32
Sex, hair colour and size of children can be selected in case of artificial insemination	27	22	38	30	43	25	17	20	36	30
There are more people older than 60 than people younger than 30 sharing flats	27	28	49	27	38	47	19	16	29	24
Because of the large number of older citizens and the consideration of younger people's interests at the same time the votes of citizens under the age of 50 count double in elections	9	8	11	8	13	8	5	10	10	7
None of these statements will have come true	6	10	1	3	2	3	12	8	8	4

Environment Question: What do you think, which of the following statements will have come true by the year 2030?	average (weighted)	Austria	5	Finland	France	Germany	Italy	Russia	Spain	UK
Most trash is recycled	50	44	77	79	77	55	32	34	57	64
Clean drinking water is a luxury item in Europe	42	49	54	54	62	39	33	45	44	23
Because of high energy costs rent for a flat including utilities is double the rent without utilities	38	46	55	41	56	64	16	29	30	32
Solar- and wind-energy account for more than half of the energy production	37	34	60	43	59	52	24	23	36	39
Pollution of the environment is no. 1 cause of death	34	29	44	33	50	27	32	39	31	22
More people live outside of big cities in order to escape environmental impacts in the inner cities	34	30	46	31	59	37	28	27	33	30
A large part of the population in developing countries has to starve because more plants a grown for regenerative energy than for food supply	26	32	41	48	53	43	9	12	21	23
The problem of climate change has been solved due to technical developments	16	11	17	14	24	12	13	18	12	13
Hunger is not an issue due to genetically modified food	14	11	16	14	15	12	9	17	13	11
Meteorological stations generate rain, sun or snow where it is required	12	8	11	11	14	7	8	16	13	7
None of these statements will have come true	6	11	1	4	1	3	11	7	6	6

Consumption Question: What do you think, which of the following statements will have come true by the year 2030?	average (weighted)	Austria	СН	Finland	France	Germany	Italy	Russia	Spain	UK
Everyday products (e.g. food) are significantly more expensive	61	64	77	75	77	80	38	49	53	73
Most consumer goods are purchased online (Internet)	36	28	56	48	69	36	16	23	35	53
More than half of all products come from Asia	34	39	55	45	62	47	20	18	36	34
Most households have at least two cars	32	36	42	44	57	27	26	19	44	42
Luxury means time and tranquillity	31	32	55	37	68	34	25	21	28	20
The biggest part of consumer spending is spent in the health sector	29	28	46	27	44	33	20	32	20	16
Most people buy eco-friendly products (green products)	28	13	35	53	59	19	16	24	28	28
Most consumer goods (cars, TV, clothes) are leased and not bought	24	31	51	22	42	35	12	17	19	19
Most food products are produced domestically (in the own country)	19	16	20	22	31	13	11	24	20	13
Service and advise are more important than a low price	16	14	30	32	31	15	6	13	16	13
None of these statements will have come true	5	10	0	3	2	2	13	6	6	3

Integration Question: What do you think, which of the following statements will have come true by the year 2030?	average (weighted)	Austria	5	Finland	France	Germany	Italy	Russia	Spain	NK
Because of the cultural diversity there are conflicts between single groups (e.g. Muslims, Africans, Turks)	38	48	63	49	57	57	22	20	39	43
Most immigrants live among each other in certain districts	35	47	53	44	65	53	15	17	36	43
More immigrants from developing countries than immigrants from EU countries come to (country)	35	37	42	54	45	43	26	27	38	40
In Europe one third of partnerships/cohabitations/ marriages are multinational/ multicultural	34	30	70	46	67	39	27	24	26	25
Portable devices and telephones with simultaneous translation make communication easy	31	30	58	54	67	37	20	24	37	34
Faith and religion play an important role in immigration politics	26	39	46	41	42	31	20	19	1 <i>7</i>	27
The integration of immigrants is easier	25	17	38	49	36	20	18	22	32	27
In most European countries integration works only with educated immigrants	23	30	44	35	45	29	14	17	20	16
Many European countries encourage immigration in order to counteract the aging of society	21	25	30	44	37	26	12	15	24	16
In order to counteract people's fears Europe has closed its borders for Non- Europeans	18	19	21	12	36	16	12	15	20	16
None of these statements will have come true	10	11	2	5	3	5	16	16	8	7

Work Question: What do you think, which of the following statements will have come true by the year 2030?	Total population	female	male	15- 34 years	35 – 54 years	55 + years
Many employees have second or side jobs	63	63	63	61	67	59
Most employees have to work up to the age of 75	43	44	43	48	47	34
Production of goods takes mainly place in developing countries	43	43	43	46	42	41
Identification/empathy with the employer is low	29	27	31	28	31	26
The 10 biggest European companies employ more than half of the European workforce	24	22	25	21	28	22
Every full-time employee has worked at least once abroad	18	18	19	19	18	18
Leisure time is more important for employees than a good salary	14	14	14	16	15	11
Because of automation most people work less than 25 hours a week	12	13	12	11	14	12
Full employment is possible because of the declining population	12	11	13	14	13	9
None of these statements will have come true	12	14	10	9	10	1 <i>7</i>
Many employees receive dwelling, food, payments for pension funds and pocket money for their disposal instead of a salary	9	9	10	11	10	8

Relationship between poor and rich Question: What do you think, which of the following statements will have come true by the year 2030?	Total population	female	male	15- 34 years	35 – 54 years	55 + years
The gap between poor and rich has become wider in Austria	67	67	67	61	71	68
Old age poverty is an unsolved problem	58	60	56	52	64	57
Many employees do not earn enough to save money for retirement	56	57	55	55	59	54
The middle class has almost disappeared	56	55	56	59	59	48
Life expectancy of rich people is much higher than life expectancy of poor people	40	40	41	37	43	40
The government guaranties a minimum income for all – independent of age, gender, origin etc.	21	22	20	20	21	21
Educational programs provide children from common families with the same educational opportunities as children from academic families	13	13	13	14	12	14
The higher the income the more children the Austrian are able to "afford"	10	10	10	13	9	8
The gap between industrialised nations and developing countries has become smaller	9	10	9	10	9	8
None of these statements will have come true	9	8	9	9	7	10
The income of top managers has declined	8	8	8	9	8	8

Education Question: What do you think, which of the following statements will have come true by the year 2030?	Total population	female	male	15- 34 years	35 – 54 years	55 + years
Most Europeans speak at least 2 languages fluently	48	48	49	52	53	40
More and more highly qualified women assume leading management jobs	48	50	45	47	51	44
One fourth of the young employees work in professions which did not yet exist in 2008	37	38	37	36	39	36
At least one further training per year is standard for each employee	34	34	35	28	39	34
Online-lectures are given simultaneously by the best professors at different universities	29	29	29	35	29	22
A system to detect special abilities develops many children starting already in kindergarten	25	24	27	26	24	26
There are more private schools than public schools in Austria	24	25	24	25	30	1 <i>7</i>
Talent scouts look for new recruits for big companies already in elementary schools	20	18	23	19	24	18
Informal education (e.g. self-development) is more important than formal education (e.g. school education)	18	16	20	17	20	17
None of these statements will have come true	16	17	15	14	11	23
Media are responsible for 1/3 of education and broadcast special educational programs for this purpose	15	14	16	18	13	15

Security Question: What do you think, which of the following statements will have come true by the year 2030?	Total population	female	male	15- 34 years	35 – 54 years	55 + years
Organised crime is a big problem in all European countries	58	55	61	55	60	58
Internet related crime has increased very much	54	54	55	60	57	46
Warlike conflicts about natural resources like oil, gas or water take place	46	46	47	46	45	48
The crime rate of foreigners / immigrants doubles the crime rate of natives	43	42	43	39	42	47
Penalties for criminal acts are higher	38	36	39	42	39	32
European / international data transfer helps to solve crime faster, people feel more secure than today	29	28	31	29	32	27
For many people security is more important than their own privacy	28	28	29	26	29	30
Surveillance computers identify many criminals directly when committing a crime	27	26	29	27	30	24
New technologies like bio-or nano-technologies are more dangerous as expected in 2008	22	21	23	19	27	19
Many people wear a chip for identification and localisation	19	19	20	24	21	12
None of these statements will have come true	9	9	9	6	9	12

Family Question: What do you think, which of the following statements will have come true by the year 2030?	Total population	female	male	15- 34 years	35 – 54 years	55 + years
Most couples live together without being married	68	69	66	67	69	66
Same-gender couples are allowed to get married and to adopt children	43	46	41	49	45	37
Because of the aging society more and more day care centres for senior citizens (like day-care facilities for children) open	41	41	41	38	44	40
The compatibility of work and family (work-life-balance) is possible for many women	31	33	29	32	29	32
There are more people older than 60 than people younger than 30 sharing flats	28	28	27	27	33	22
Every third partnership/ cohabitation/marriage results from internet-dating-networks	27	26	29	37	31	15
Family members bear the financial responsibility for the oldage pensions of their parents/grand parents	27	30	24	28	29	24
Sex, hair colour and size of children can be selected in case of artificial insemination	22	24	20	24	22	20
Women have two children on average	19	21	17	23	20	14
None of these statements will have come true	10	10	10	8	8	14
Because of the large number of older citizens and the consideration of younger people's interests at the same time the votes of citizens under the age of 50 count double in elections	8	7	9	7	7	10

Environment Question: What do you think, which of the following statements will have come true by the year 2030?	Total population	female	male	15- 34 years	35 – 54 years	55 + years
Clean drinking water is a luxury item in Europe	49	50	48	44	53	50
Because of high energy costs rent for a flat including utilities is double the rent without utilities	46	48	45	48	46	44
Most trash is recycled	44	42	47	43	46	44
Solar- and wind-energy account for more than half of the energy production	34	35	34	33	40	30
A large part of the population in developing countries has to starve because more plants a grown for regenerative energy than for food supply	32	33	30	33	33	29
More people live outside of big cities in order to escape environmental impacts in the inner cities	30	28	31	31	27	31
Pollution of the environment is no. 1 cause of death	29	28	29	30	31	24
Hunger is not an issue due to genetically modified food	11	10	13	11	13	9
The problem of climate change has been solved due to technical developments	11	12	11	13	11	10
None of these statements will have come true	11	10	11	10	9	13
Meteorological stations generate rain, sun or snow where it is required	8	8	7	8	9	6

Consumption Question: What do you think, which of the following statements will have come true by the year 2030?	Total population	female	male	15- 34 years	35 – 54 years	55 + years
Everyday products (e.g. food) are significantly more expensive	64	65	63	66	65	62
More than half of all products come from Asia	39	39	39	37	40	38
Most households have at least two cars	36	35	38	34	39	36
Luxury means time and tranquillity	32	31	32	31	37	26
Most consumer goods (cars, TV, clothes) are leased and not bought	31	29	33	32	38	22
The biggest part of consumer spending is spent in the health sector	28	30	27	26	31	27
Most consumer goods are purchased online (Internet)	28	25	31	39	29	1 <i>7</i>
Most food products are produced domestically (in the own country)	16	16	16	13	17	18
Service and advise are more important than a low price	14	11	17	9	18	13
Most people buy eco-friendly products (green products)	13	14	12	15	13	13
None of these statements will have come true	10	10	9	9	9	11

Integration Question: What do you think, which of the following statements will have come true by the year 2030?	Total population	female	male	15- 34 years	35 – 54 years	55 + years
Because of the cultural diversity there are conflicts between single groups (e.g. Muslims, Africans, Turks)	48	48	48	45	50	48
Most immigrants live among each other in certain districts	47	46	48	43	51	47
Faith and religion play an important role in immigration politics	39	38	40	37	43	37
More immigrants from developing countries than immigrants from EU countries come to Austria	37	39	35	41	34	37
Portable devices and telephones with simultaneous translation make communication easy	30	28	33	34	31	27
In Europe one third of partnerships/cohabitations/ marriages are multinational/ multicultural	30	30	31	34	32	24
In most European countries integration works only with educated immigrants	30	28	31	25	32	31
Many European countries encourage immigration in order to counteract the aging of society	25	22	27	23	24	27
In order to counteract people's fears Europe has closed its borders for Non-Europeans	19	20	18	19	20	19
The integration of immigrants is easier	17	16	17	19	17	15
None of these statements will have come true	11	12	11	9	10	15

Work Question: What do you think, which of the following statements will have come true by the year 2030?	Total population	female	male	15- 34 years	35 – 54 years	55 + years
Many employees have second or side jobs	55	59	52	44	55	66
Leisure time is more important for employees than a good salary	48	50	46	43	54	47
Production of goods takes mainly place in developing countries	48	46	50	48	47	49
Most employees have to work up to the age of 75	45	50	40	49	50	36
Identification/empathy with the employer is low	37	36	37	39	35	37
Full employment is possible because of the declining population	27	31	24	17	30	35
The 10 biggest European companies employ more than half of the European workforce	25	26	25	21	26	28
Because of automation most people work less than 25 hours a week	25	26	24	22	25	27
Every full-time employee has worked at least once abroad	19	21	17	18	15	23
Many employees receive dwelling, food, payments for pension funds and pocket money for their disposal instead of a salary	14	13	15	10	17	15
None of these statements will have come true	5	4	5	6	3	5

Relationship between poor and rich Question: What do you think, which of the following statements will have come true by the year 2030?	Total population	female	male	15- 34 years	35 – 54 years	55 + years
The gap between poor and rich has become wider in Finland	71	71	70	67	72	72
Many employees do not earn enough to save money for retirement	56	56	55	52	60	55
Life expectancy of rich people is much higher than life expectancy of poor people	53	50	56	47	62	50
Old age poverty is an unsolved problem	48	52	44	38	50	57
Educational programs provide children from common families with the same educational opportunities as children from academic families	37	39	34	42	35	33
The government guaranties a minimum income for all – independent of age, gender, origin etc.	31	32	30	28	31	34
The higher the income the more children the Finnish are able to "afford"	31	28	33	37	30	25
The gap between industrialised nations and developing countries has become smaller	25	25	25	25	22	27
The middle class has almost disappeared	24	25	24	21	26	26
The income of top managers has declined	14	14	14	9	12	20
None of these statements will have come true	2	2	1	3	0	2

Education Question: What do you think, which of the following statements will have come true by the year 2030?	Total population	female	male	15- 34 years	35 – 54 years	55 + years
More and more highly qualified women assume leading management jobs	74	77	70	69	77	74
Most Europeans speak at least 2 languages fluently	63	66	61	60	62	68
Online-lectures are given simultaneously by the best professors at different universities	54	56	53	48	60	54
One fourth of the young employees work in professions which did not yet exist in 2008	45	50	39	33	48	51
Talent scouts look for new recruits for big companies already in elementary schools	44	40	47	35	44	51
At least one further training per year is standard for each employee	41	46	36	35	43	46
A system to detect special abilities develops many children starting already in kindergarten	37	39	36	31	38	43
Informal education (e.g. self-development) is more important than formal education (e.g. school education)	31	31	31	27	32	34
Media are responsible for 1/3 of education and broadcast special educational programs for this purpose	23	24	22	21	22	27
There are more private schools than public schools in Finland	22	22	23	16	22	29
None of these statements will have come true	3	3	3	3	2	4

Security Question: What do you think, which of the following statements will have come true by the year 2030?	Total population	female	male	15- 34 years	35 – 54 years	55 + years
Internet related crime has increased very much	79	79	78	82	80	74
Organised crime is a big problem in all European countries	67	69	65	54	70	76
Warlike conflicts about natural resources like oil, gas or water take place	65	62	67	63	66	64
Surveillance computers identify many criminals directly when committing a crime	55	55	54	50	52	62
For many people security is more important than their own privacy	50	55	45	40	56	53
Many people wear a chip for identification and localisation	45	43	46	40	43	51
Penalties for criminal acts are higher	40	38	42	44	40	37
The crime rate of foreigners / immigrants doubles the crime rate of natives	36	31	40	32	36	39
New technologies like bio-or nano-technologies are more dangerous as expected in 2008	33	36	29	31	34	32
European / international data transfer helps to solve crime faster, people feel more secure than today	31	30	33	30	33	31
None of these statements will have come true	2	2	2	2	2	3

Family Question: What do you think, which of the following statements will have come true by the year 2030?	Total population	female	male	15- 34 years	35 – 54 years	55 + years
Most couples live together without being married	68	73	62	70	63	70
Same-gender couples are allowed to get married and to adopt children	67	71	64	73	72	58
The compatibility of work and family (work-life-balance) is possible for many women	51	53	48	50	49	53
Because of the aging society more and more day care centres for senior citizens (like day-care facilities for children) open	49	53	45	42	55	51
Women have two children on average	46	51	41	46	42	50
Every third partnership/ cohabitation/marriage results from internet-dating-networks	40	43	38	43	45	33
Sex, hair colour and size of children can be selected in case of artificial insemination	30	30	30	27	36	27
There are more people older than 60 than people younger than 30 sharing flats	27	29	25	19	30	31
Family members bear the financial responsibility for the oldage pensions of their parents/grand parents	21	23	19	20	24	20
Because of the large number of older citizens and the consideration of younger people's interests at the same time the votes of citizens under the age of 50 count double in elections	8	8	8	6	6	11
None of these statements will have come true	3	2	3	3	2	3

Environment Question: What do you think, which of the following statements will have come true by the year 2030?	Total population	female	male	15- 34 years	35 – 54 years	55 + years
Most trash is recycled	79	80	79	76	81	80
Clean drinking water is a luxury item in Europe	54	57	51	47	57	58
A large part of the population in developing countries has to starve because more plants a grown for regenerative energy than for food supply	48	48	47	43	48	51
Solar- and wind-energy account for more than half of the energy production	43	47	39	46	44	40
Because of high energy costs rent for a flat including utilities is double the rent without utilities	41	44	38	38	43	41
Pollution of the environment is no. 1 cause of death	33	36	30	27	37	34
More people live outside of big cities in order to escape environmental impacts in the inner cities	31	33	28	27	33	33
The problem of climate change has been solved due to technical developments	14	14	15	14	13	16
Hunger is not an issue due to genetically modified food	14	13	15	16	12	13
Meteorological stations generate rain, sun or snow where it is required	11	9	12	13	8	11
None of these statements will have come true	4	3	4	4	3	3

Consumption Question: What do you think, which of the following statements will have come true by the year 2030?	Total population	female	male	15- 34 years	35 – 54 years	55 + years
Everyday products (e.g. food) are significantly more expensive	75	76	73	75	79	70
Most people buy eco-friendly products (green products)	53	55	51	48	55	55
Most consumer goods are purchased online (Internet)	48	52	45	51	49	46
More than half of all products come from Asia	45	37	52	48	41	44
Most households have at least two cars	44	50	37	39	45	46
Luxury means time and tranquillity	37	41	33	32	43	36
Service and advise are more important than a low price	32	35	30	25	33	38
The biggest part of consumer spending is spent in the health sector	27	29	25	23	24	33
Most consumer goods (cars, TV, clothes) are leased and not bought	22	21	24	15	26	26
Most food products are produced domestically (in the own country)	22	22	22	21	19	27
None of these statements will have come true	3	2	3	4	1	3

Integration Question: What do you think, which of the following statements will have come true by the year 2030?	Total population	female	male	15- 34 years	35 – 54 years	55 + years
Portable devices and telephones with simultaneous translation make communication easy	54	55	53	52	57	53
More immigrants from developing countries than immigrants from EU countries come to Finland	54	55	52	50	51	60
The integration of immigrants is easier	49	48	50	50	49	48
Because of the cultural diversity there are conflicts between single groups (e.g. Muslims, Africans, Turks)	49	47	51	44	53	49
In Europe one third of partnerships/cohabitations/ marriages are multinational/ multicultural	46	51	40	42	48	48
Many European countries encourage immigration in order to counteract the aging of society	44	46	42	37	49	47
Most immigrants live among each other in certain districts	44	40	47	41	44	46
Faith and religion play an important role in immigration politics	41	45	37	35	36	52
In most European countries integration works only with educated immigrants	35	36	35	32	36	39
In order to counteract people's fears Europe has closed its borders for Non-Europeans	12	10	14	8	15	12
None of these statements will have come true	5	5	4	6	2	6

Work Question: What do you think, which of the following statements will have come true by the year 2030?	Total population	female	male	15- 34 years	35 – 54 years	55 + years
Many employees have second or side jobs	74	74	74	75	74	73
Most employees have to work up to the age of 75	56	59	51	62	60	45
Production of goods takes mainly place in developing countries	51	47	55	53	49	50
The 10 biggest European companies employ more than half of the European workforce	43	42	45	43	46	41
Every full-time employee has worked at least once abroad	36	35	36	35	30	42
Identification/empathy with the employer is low	32	31	34	32	32	33
Because of automation most people work less than 25 hours a week	29	27	31	34	25	28
Leisure time is more important for employees than a good salary	29	27	30	24	28	33
Many employees receive dwelling, food, payments for pension funds and pocket money for their disposal instead of a salary	22	21	22	21	25	19
Full employment is possible because of the declining population	19	18	20	19	19	19
None of these statements will have come true	3	2	4	1	2	6

Relationship between poor and rich Question: What do you think, which of the following statements will have come true by the year 2030?	<b>Total</b> population	female	male	15-34 years	35 – 54 years	55 + years
Many employees do not earn enough to save money for retirement	80	81	79	84	80	78
Old age poverty is an unsolved problem	76	74	77	76	74	77
The gap between poor and rich has become wider in France	75	75	75	73	78	74
Life expectancy of rich people is much higher than life expectancy of poor people	62	62	62	61	62	63
The middle class has almost disappeared	48	48	48	48	47	48
The gap between industrialised nations and developing countries has become smaller	39	35	44	39	36	42
Educational programs provide children from common families with the same educational opportunities as children from academic families	36	33	39	40	32	36
The government guaranties a minimum income for all – independent of age, gender, origin etc.	33	31	36	38	32	31
The higher the income the more children the French are able to "afford"	30	28	33	38	31	23
The income of top managers has declined	19	20	18	22	18	18
None of these statements will have come true	2	2	2	1	2	2

Education  Question: What do you think, which of the following statements will have come true by the year 2030?	Total population	female	male	15- 34 years	35 – 54 years	55 + years
More and more highly qualified women assume leading management jobs	78	75	81	81	76	78
Most Europeans speak at least 2 languages fluently	68	65	71	70	65	68
At least one further training per year is standard for each employee	62	59	65	62	61	62
Online-lectures are given simultaneously by the best professors at different universities	61	57	65	69	58	56
One fourth of the young employees work in professions which did not yet exist in 2008	59	61	57	62	55	61
A system to detect special abilities develops many children starting already in kindergarten	51	51	51	50	48	55
Media are responsible for 1/3 of education and broadcast special educational programs for this purpose	43	41	44	43	40	45
There are more private schools than public schools in France	38	35	42	41	34	40
Informal education (e.g. self-development) is more important than formal education (e.g. school education)	36	34	39	34	40	36
Talent scouts look for new recruits for big companies already in elementary schools	30	25	36	26	26	38
None of these statements will have come true	4	4	3	2	3	6

Security Question: What do you think, which of the following statements will have come true by the year 2030?	Total population	female	male	15- 34 years	35 – 54 years	55 + years
Warlike conflicts about natural resources like oil, gas or water take place	67	68	66	73	63	65
Internet related crime has increased very much	64	62	66	68	62	62
Surveillance computers identify many criminals directly when committing a crime	63	60	66	69	62	60
Organised crime is a big problem in all European countries	63	60	65	60	61	67
Penalties for criminal acts are higher	59	58	60	62	61	54
New technologies like bio-or nano-technologies are more dangerous as expected in 2008	49	48	50	55	47	45
European / international data transfer helps to solve crime faster, people feel more secure than today	49	45	53	50	48	48
For many people security is more important than their own privacy	47	46	49	45	44	53
Many people wear a chip for identification and localisation	47	44	50	50	44	47
The crime rate of foreigners / immigrants doubles the crime rate of natives	35	30	41	29	34	43
None of these statements will have come true	3	3	2	1	2	4

Family Question: What do you think, which of the following statements will have come true by the year 2030?	Total population	female	male	15- 34 years	35 – 54 years	55 + years
Most couples live together without being married	82	83	82	91	76	81
Same-gender couples are allowed to get married and to adopt children	72	71	72	80	73	62
Because of the aging society more and more day care centres for senior citizens (like day-care facilities for children) open	<i>7</i> 1	69	73	73	69	70
Women have two children on average	65	64	65	65	62	67
Every third partnership/ cohabitation/marriage results from internet-dating-networks	62	63	61	66	63	58
The compatibility of work and family (work-life-balance) is possible for many women	56	53	59	59	54	55
Sex, hair colour and size of children can be selected in case of artificial insemination	43	42	44	49	44	37
Family members bear the financial responsibility for the oldage pensions of their parents/grand parents	41	43	40	47	45	33
There are more people older than 60 than people younger than 30 sharing flats	38	38	38	37	44	33
Because of the large number of older citizens and the consideration of younger people's interests at the same time the votes of citizens under the age of 50 count double in elections	13	12	14	12	13	14
None of these statements will have come true	2	2	3	1	2	4

Environment Question: What do you think, which of the following statements will have come true by the year 2030?	Total population	female	male	15- 34 years	35 – 54 years	55 + years
Most trash is recycled	77	77	77	78	75	77
Clean drinking water is a luxury item in Europe	62	61	64	52	66	68
Solar- and wind-energy account for more than half of the energy production	59	61	57	58	62	58
More people live outside of big cities in order to escape environmental impacts in the inner cities	59	60	57	60	58	58
Because of high energy costs rent for a flat including utilities is double the rent without utilities	56	55	56	60	56	51
A large part of the population in developing countries has to starve because more plants a grown for regenerative energy than for food supply	53	50	57	53	56	51
Pollution of the environment is no. 1 cause of death	50	51	50	42	52	56
The problem of climate change has been solved due to technical developments	24	23	25	22	24	26
Hunger is not an issue due to genetically modified food	15	14	16	13	14	18
Meteorological stations generate rain, sun or snow where it is required	14	13	14	17	11	14
None of these statements will have come true	1	2	1	1	1	2

Consumption Question: What do you think, which of the following statements will have come true by the year 2030?	Total population	female	male	15- 34 years	35 – 54 years	55 + years
Everyday products (e.g. food) are significantly more expensive	77	76	79	84	74	75
Most consumer goods are purchased online (Internet)	69	66	71	76	65	66
Luxury means time and tranquillity	68	67	68	73	70	61
More than half of all products come from Asia	62	58	67	68	61	59
Most people buy eco-friendly products (green products)	59	56	63	57	61	61
Most households have at least two cars	57	57	57	58	57	56
The biggest part of consumer spending is spent in the health sector	44	45	43	45	42	45
Most consumer goods (cars, TV, clothes) are leased and not bought	42	37	47	39	45	41
Most food products are produced domestically (in the own country)	31	30	33	28	32	34
Service and advise are more important than a low price	31	27	35	26	33	35
None of these statements will have come true	2	2	2	1	1	3

Integration Question: What do you think, which of the following statements will have come true by the year 2030?	Total population	female	male	15- 34 years	35 – 54 years	55 + years
Portable devices and telephones with simultaneous translation make communication easy	67	66	69	70	69	64
In Europe one third of partnerships/cohabitations/ marriages are multinational/ multicultural	67	67	67	72	68	61
Most immigrants live among each other in certain districts	65	60	70	64	61	69
Because of the cultural diversity there are conflicts between single groups (e.g. Muslims, Africans, Turks)	57	55	59	54	54	63
In most European countries integration works only with educated immigrants	45	40	50	43	40	51
More immigrants from developing countries than immigrants from EU countries come to France	45	42	48	45	43	45
Faith and religion play an important role in immigration politics	42	41	43	38	39	49
Many European countries encourage immigration in order to counteract the aging of society	37	33	41	33	39	38
In order to counteract people's fears Europe has closed its borders for Non-Europeans	36	34	38	33	35	39
The integration of immigrants is easier	36	32	39	40	36	31
None of these statements will have come true	3	4	2	2	2	5

Work Question: What do you think, which of the following statements will have come true by the year 2030?	Total population	female	male	14- 34 years	35 – 54 years	55 + years
Many employees have second or side jobs	78	79	78	77	80	78
Most employees have to work up to the age of 75 years	49	49	50	49	51	52
Production of goods takes mainly place in developing countries	48	48	49	49	51	46
Identification/empathy with the employer is low	39	38	40	40	39	40
The 10 biggest European countries employ more than half of the European workforce	24	22	26	22	26	24
Full employment is possible because of the declining population	17	16	18	15	17	19
Every full-time employee has worked at least once abroad	14	14	15	14	14	15
Because of the automation people work less than 25 hours a week	14	14	15	15	13	14
Leisure time is more important for employees than a good salary	12	12	13	13	12	12
Many employees receive dwelling, food, payments for pension funds and pocket money for their disposal instead of a salary	12	11	13	12	12	11
None of these statements	4	4	3	4	2	5

Relationship between poor and rich Question: What do you think, which of the following statements will have come true by the year 2030?	Total population	female	male	14- 34 years	35 – 54 years	55 + years
The gap between poor and rich becomes wider in Germany	82	83	82	80	84	84
Old age poverty is an unsolved problem	76	78	75	68	76	83
Many employees do not earn enough to save money for retirement	75	75	75	72	77	76
The middle class has almost disappeared	68	68	69	64	72	68
Life expectancy of rich people is much higher than life expectancy of poor people	57	56	58	51	60	59
The government guaranties a minimum income for all – independent of age, gender, origin etc.	21	21	22	22	19	23
The gap between industrialised nations and developing countries has become smaller	16	15	17	14	18	16
Educational programs provide children from common families with the same educational opportunities as children from academic families	15	15	14	17	13	15
The higher the income the more children the Germans are able to "afford"	14	13	14	14	15	12
The income of top manager has declined	11	12	11	10	11	12
None of these statements	2	2	2	3	1	2

Education Question: What do you think, which of the following statements will have come true by the year 2030?	Total population	female	male	14- 34 years	35 – 54 years	55 + years
More and more highly qualified women assume leading management jobs	60	62	59	59	63	58
One fourth of the young employees work in professions which did not yet exist in 2008	49	48	50	49	46	51
Most Europeans speak at least 2 languages fluently	48	48	47	50	47	47
A system to detect special abilities develops many children starting already in kindergarten	41	40	41	38	42	41
Online-lectures are given simultaneously by the best professors at different universities	40	40	41	42	45	34
At least one further training per year is standard for each employee	36	34	38	35	37	35
There are more private schools than public schools in Germany	32	34	29	32	34	29
Talent scouts look for new recruits for big companies already in elementary schools	25	22	28	24	26	25
Media are responsible for 1/3 of education and broadcast special educational programs for this purpose	24	23	24	25	24	23
Informal education (e.g. self-development) is more important than formal education (e.g. school education)	22	22	22	21	22	22
None of these statements will have come true	6	6	5	6	5	7

Security Question: What do you think, which of the following statements will have come true by the year 2030?	Total population	female	male	14- 34 years	35 – 54 years	55 + years
Organised crime is a big problem in all European countries	68	67	69	65	69	69
Internet related crime has increased very much	67	65	69	70	69	63
Warlike conflicts about natural resources like oil, gas or water take place	57	56	58	53	57	60
The crime rate of foreigners / immigrants doubles the crime rate of natives	43	43	44	36	45	47
Penalties for criminal acts are higher	43	44	43	45	44	42
Surveillance computers identify many criminals directly when committing a crime	38	37	38	39	36	38
European / international data transfer helps to solve crime faster, people feel more secure than today	35	35	35	34	34	38
For many people security is more important than their own privacy	32	34	30	27	33	34
New technologies like bio-or nano-technologies are more dangerous as expected in 2008	28	29	26	24	30	28
Many people wear a chip for identification and localisation	23	22	24	25	25	21
None of these statements will have come true	2	3	2	3	2	2

Family Question: What do you think, which of the following statements will have come true by the year 2030?	Total population	female	male	14- 34 years	35 – 54 years	55 + years
Most couples live together without being married	70	68	72	74	69	68
Same-gender couples are allowed to get married and to adopt children	55	55	54	61	56	48
Because of the aging society more and more day care centres for senior citizens (like day-care facilities for children) open	52	53	52	46	52	57
There are more people older than 60 than people younger than 30 sharing flats	47	48	47	39	49	52
The compatibility of work and family (work-life-balance) is possible for many women	41	43	38	42	41	40
Every third partnership/ cohabitation/marriage results from internet-dating-networks	40	40	41	48	42	32
Family members bear the financial responsibility for the oldage pensions of their parents/grand parents	38	37	40	38	44	33
Sex, hair colour and size of children can be selected in case of artificial insemination	25	25	26	27	31	19
Women have two children on average	20	20	20	20	21	18
Because of the large number of older citizens and the consideration of younger people's interests at the same time the votes of citizens under the age of 50 count double in elections	8	8	9	8	8	9
None of these statements will have come true	3	3	3	3	3	3

Environment Question: What do you think, which of the following statements will have come true by the year 2030?	Total population	female	male	14- 34 years	35 – 54 years	55 + years
Because of high energy costs rent for a flat including utilities is double the rent without utilities	64	65	63	59	67	64
Most trash is recycled	55	52	57	58	54	52
Solar- and wind-energy account for more than half of the energy production	52	52	52	57	52	48
A large part of the population in developing countries has to starve because more plants a grown for regenerative energy than for food supply	43	45	41	37	43	48
Clean drinking water is a luxury item in Europe	39	39	39	33	41	40
More people live outside of big cities in order to escape environmental impacts in the inner cities	37	37	36	36	36	38
Pollution of the environment is no. 1 cause of death	27	28	27	26	28	28
Hunger is not an issue due to genetically modified food	12	11	12	14	11	10
The problem of climate change has been solved due to technical developments	12	10	13	14	12	10
Meteorological stations generate rain, sun or snow where it is required	7	7	7	7	8	6
None of these statements will have come true	3	3	3	3	2	3

Consumption Question: What do you think, which of the following statements will have come true by the year 2030?	Total population	female	male	14- 34 years	35 – 54 years	55 + years
Everyday products (e.g. food) are significantly more expensive	80	79	80	79	79	80
More than half of all products come from Asia	47	46	49	50	48	45
Most consumer goods are purchased online (Internet)	36	36	36	47	38	26
Most consumer goods (cars, TV, clothes) are leased and not bought	35	35	35	33	37	34
Luxury means time and tranquillity	34	33	35	35	39	29
The biggest part of consumer spending is spent in the health sector	33	33	33	30	32	36
Most households have at least two cars	27	28	26	28	28	27
Most people buy eco-friendly products (green products)	19	22	15	20	18	18
Service and advise are more important than a low price	15	13	17	12	13	19
Most food products are produced domestically (in the own country)	13	12	13	10	13	14
None of these statements will have come true	2	3	2	2	2	3

Integration Question: What do you think, which of the following statements will have come true by the year 2030?	Total population	female	male	14- 34 years	35 – 54 years	55 + years
Because of the cultural diversity there are conflicts between single groups (e.g. Muslims, Africans, Turks)	57	58	56	53	57	59
Most immigrants live among each other in certain districts	53	53	53	49	55	53
More immigrants from developing countries than immigrants from EU countries come to Germany	43	43	43	38	44	45
In Europe one third of partnerships/cohabitations/ marriages are multinational/ multicultural	39	38	40	43	40	34
Portable devices and telephones with simultaneous translation make communication easy	37	37	38	40	36	37
Faith and religion play an important role in immigration politics	31	31	31	28	31	33
In most European countries integration works only with educated immigrants	29	29	28	25	31	30
Many European countries encourage immigration in order to counteract the aging of society	26	23	30	21	25	31
The integration of immigrants is easier	20	18	21	22	19	19
In order to counteract people's fears Europe has closed its borders for Non-Europeans	16	14	17	14	16	16
None of these statements will have come true	5	6	4	5	4	6

Work Question: What do you think, which of the following statements will have come true by the year 2030?	Total population	female	male	14- 34 years	35 – 54 years	55 + years
Most employees have to work up to the age of 75	38	36	40	43	35	37
Many employees have second or side jobs	31	30	31	27	34	30
Production of goods takes mainly place in developing countries	24	24	23	27	24	21
None of these statements will have come true	15	15	16	13	14	18
Leisure time is more important for employees than a good salary	14	14	15	14	18	10
Because of automation most people work less than 25 hours a week	14	11	17	18	13	12
Full employment is possible because of the declining population	13	11	14	12	13	13
Many employees receive dwelling, food, payments for pension funds and pocket money for their disposal instead of a salary	11	11	11	12	9	12
The 10 biggest European companies employ more than half of the European workforce	9	9	9	10	10	8
Identification/empathy with the employer is low	9	6	11	11	9	6
Every full-time employee has worked at least once abroad	7	6	7	7	7	5

Relationship between poor and rich Question: What do you think, which of the following statements will have come true by the year 2030?	Total population	female	male	14- 34 years	35 – 54 years	55 + years
The gap between poor and rich has become wider in Italy	39	39	38	39	40	38
Many employees do not earn enough to save money for retirement	32	29	36	31	35	31
The middle class has almost disappeared	31	29	33	36	31	26
Old age poverty is an unsolved problem	29	30	28	25	32	29
Life expectancy of rich people is much higher than life expectancy of poor people	19	19	20	19	20	19
The gap between industrialised nations and developing countries has become smaller	13	12	15	16	14	11
None of these statements will have come true	12	12	12	11	12	12
The income of top managers has declined	11	10	12	12	12	10
The government guaranties a minimum income for all – independent of age, gender, origin etc.	8	9	7	8	6	10
Educational programs provide children from common families with the same educational opportunities as children from academic families	8	8	7	12	7	6
The higher the income the more children the Italians are able to "afford"	4	3	4	5	4	3

Education  Question: What do you think, which of the following statements will have come true by the year 2030?	Total population	female	male	14- 34 years	35 – 54 years	55 + years
Most Europeans speak at least 2 languages fluently	31	30	31	31	35	26
More and more highly qualified women assume leading management jobs	27	28	26	26	33	22
At least one further training per year is standard for each employee	25	25	26	30	22	24
There are more private schools than public schools in Italy	25	21	28	23	25	25
One fourth of the young employees work in professions which did not yet exist in 2008	24	23	25	20	28	24
Online-lectures are given simultaneously by the best professors at different universities	18	16	20	22	21	12
None of these statements will have come true	17	18	15	16	16	18
Media are responsible for 1/3 of education and broadcast special educational programs for this purpose	13	12	14	14	14	11
A system to detect special abilities develops many children starting already in kindergarten	12	11	13	8	14	13
Informal education (e.g. self-development) is more important than formal education (e.g. school education)	10	11	9	10	7	13
Talent scouts look for new recruits for big companies already in elementary schools	8	7	9	9	9	8

Security Question: What do you think, which of the following statements will have come true by the year 2030?	Total population	female	male	14- 34 years	35 – 54 years	55 + years
Organised crime is a big problem in all European countries	32	32	32	32	33	30
Warlike conflicts about natural resources like oil, gas or water take place	28	25	31	24	31	29
Penalties for criminal acts are higher	26	24	28	26	27	25
The crime rate of foreigners / immigrants doubles the crime rate of natives	26	27	24	28	23	26
For many people security is more important than their own privacy	21	23	19	22	23	19
Internet related crime has increased very much	20	20	20	24	21	16
Surveillance computers identify many criminals directly when committing a crime	18	17	19	24	18	13
Many people wear a chip for identification and localisation	16	15	16	18	17	13
New technologies like bio-or nano-technologies are more dangerous as expected in 2008	13	11	15	16	12	11
None of these statements will have come true	12	11	14	13	11	13
European / international data transfer helps to solve crime faster, people feel more secure than today	12	11	13	10	16	9

Family Question: What do you think, which of the following statements will have come true by the year 2030?	Total population	Total population female		14- 34 years	35 – 54 years	55 + years
Most couples live together without being married	51	51	52	52	56	47
Family members bear the financial responsibility for the oldage pensions of their parents/grand parents	23	21	25	22	23	23
Same-gender couples are allowed to get married and to adopt children	23	23	22	26	26	18
Because of the aging society more and more day care centres for senior citizens (like day-care facilities for children) open	21	21	22	21	24	20
Every third partnership/ cohabitation/marriage results from internet-dating-networks	20	22	18	22	22	16
There are more people older than 60 than people younger than 30 sharing flats	19	16	21	18	19	19
Sex, hair colour and size of children can be selected in case of artificial insemination	17	18	16	18	16	1 <i>7</i>
The compatibility of work and family (work-life-balance) is possible for many women	14	15	14	16	14	14
Women have two children on average	12	9	14	14	10	11
None of these statements will have come true	12	10	13	10	11	14
Because of the large number of older citizens and the consideration of younger people's interests at the same time the votes of citizens under the age of 50 count double in elections	5	6	5	5	7	5

Environment Question: What do you think, which of the following statements will have come true by the year 2030?	Total population	female	male	14- 34 years	35 – 54 years	55 + years
Clean drinking water is a luxury item in Europe	33	30	35	33	34	31
Most trash is recycled	32	32	33	34	37	26
Pollution of the environment is no. 1 cause of death	32	33	31	31	36	29
More people live outside of big cities in order to escape environmental impacts in the inner cities	28	29	27	29	31	24
Solar- and wind-energy account for more than half of the energy production	24	23	24	24	24	24
Because of high energy costs rent for a flat including utilities is double the rent without utilities	16	15	17	17	16	16
The problem of climate change has been solved due to technical developments	13	12	13	14	12	12
None of these statements will have come true	11	12	11	10	11	13
A large part of the population in developing countries has to starve because more plants a grown for regenerative energy than for food supply	9	10	9	9	11	9
Hunger is not an issue due to genetically modified food	9	6	11	8	9	9
Meteorological stations generate rain, sun or snow where it is required	8	7	9	13	7	5

Consumption Question: What do you think, which of the following statements will have come true by the year 2030?	Total population	female	male	14- 34 years	35 – 54 years	55 + years
Everyday products (e.g. food) are significantly more expensive	38	38	39	36	41	38
Most households have at least two cars	26	27	25	25	27	25
Luxury means time and tranquillity	25	24	27	23	28	25
The biggest part of consumer spending is spent in the health sector	20	19	22	20	19	22
More than half of all products come from Asia	20	19	20	21	21	1 <i>7</i>
Most consumer goods are purchased online (Internet)	16	17	16	21	18	11
Most people buy eco-friendly products (green products)	16	16	16	18	16	15
None of these statements will have come true	13	12	13	14	11	13
Most consumer goods (cars, TV, clothes) are leased and not bought	12	11	14	12	15	10
Most food products are produced domestically (in the own country)	11	11	11	11	8	12
Service and advise are more important than a low price	6	5	7	5	9	3

Integration Question: What do you think, which of the following statements will have come true by the year 2030?	Total population	female	male	14- 34 years	35 – 54 years	55 + years
In Europe one third of partnerships/cohabitations/ marriages are multinational/ multicultural	27	29	24	25	32	24
More immigrants from developing countries than immigrants from EU countries come to Italy	26	27	24	23	25	29
Because of the cultural diversity there are conflicts between single groups (e.g. Muslims, Africans, Turks)	22	21	24	23	24	20
Faith and religion play an important role in immigration politics	20	19	21	22	18	19
Portable devices and telephones with simultaneous translation make communication easy	20	19	21	23	17	20
The integration of immigrants is easier	18	17	20	23	21	13
None of these statements will have come true	16	15	17	16	13	1 <i>7</i>
Most immigrants live among each other in certain districts	15	13	17	15	15	15
In most European countries integration works only with educated immigrants	14	12	16	17	15	10
In order to counteract people's fears Europe has closed its borders for Non-Europeans	12	12	12	14	14	10
Many European countries encourage immigration in order to counteract the aging of society	12	11	12	11	15	9

Work Question: What do you think, which of the following statements will have come true by the year 2030?	Total population	female	male	16- 34 years	35 – 54 years	55 + years
Many employees have second or side jobs	34	36	33	32	36	36
Because of automation most people work less than 25 hours a week	24	23	25	27	25	18
Most employees have to work up to the age of 75	23	23	22	19	24	28
Leisure time is more important for employees than a good salary	20	21	19	22	21	16
The 10 biggest European companies employ more than half of the European workforce	20	20	20	22	20	1 <i>7</i>
Full employment is possible because of the declining population	20	21	19	17	21	23
Production of goods takes mainly place in developing countries	18	16	19	19	18	16
None of these statements will have come true	13	12	14	12	12	16
Identification/empathy with the employer is low	12	11	13	12	13	11
Many employees receive dwelling, food, payments for pension funds and pocket money for their disposal instead of a salary	12	13	10	13	11	11
Every full-time employee has worked at least once abroad	9	10	9	12	8	6

Relationship between poor and rich Question: What do you think, which of the following statements will have come true by the year 2030?	Total population	female	male	16- 34 years	35 – 54 years	55 + years
The gap between poor and rich has become wider in Russia	42	42	42	36	46	47
Old age poverty is an unsolved problem	38	41	35	33	38	47
Many employees do not earn enough to save money for retirement	23	23	22	22	23	23
The higher the income the more children the Russian are able to "afford"	22	24	20	27	21	17
The government guaranties a minimum income for all – independent of age, gender, origin etc.	21	22	20	22	23	17
Life expectancy of rich people is much higher than life expectancy of poor people	20	19	21	21	21	18
The middle class has almost disappeared	18	17	18	17	20	14
The gap between industrialised nations and developing countries has become smaller	17	15	18	18	17	14
Educational programs provide children from common families with the same educational opportunities as children from academic families	12	11	13	14	12	9
The income of top managers has declined	7	7	6	6	9	4
None of these statements will have come true	6	6	7	7	5	7

Education Question: What do you think, which of the following statements will have come true by the year 2030?	Total population	female	male	16- 34 years	35 – 54 years	55 + years
There are more private schools than public schools in Russia	42	43	42	41	44	41
One fourth of the young employees work in professions which did not yet exist in 2008	34	35	34	38	34	30
A system to detect special abilities develops many children starting already in kindergarten	27	29	24	28	27	23
At least one further training per year is standard for each employee	24	26	23	27	23	22
Online-lectures are given simultaneously by the best professors at different universities	23	25	22	26	24	18
More and more highly qualified women assume leading management jobs	23	26	19	21	25	23
Talent scouts look for new recruits for big companies already in elementary schools	23	24	22	25	22	19
Most Europeans speak at least 2 languages fluently	22	23	21	25	22	18
Media are responsible for 1/3 of education and broadcast special educational programs for this purpose	16	18	14	18	16	13
Informal education (e.g. self-development) is more important than formal education (e.g. school education)	12	12	12	15	12	8
None of these statements will have come true	8	8	9	5	7	15

Security Question: What do you think, which of the following statements will have come true by the year 2030?	Total population	female	male	16- 34 years	35 – 54 years	55 + years
Warlike conflicts about natural resources like oil, gas or water take place	38	36	40	36	39	40
Organised crime is a big problem in all European countries	35	33	37	30	37	39
Penalties for criminal acts are higher	34	35	33	34	37	31
Surveillance computers identify many criminals directly when committing a crime	31	31	31	33	33	25
Internet related crime has increased very much	29	30	27	33	29	22
For many people security is more important than their own privacy	28	30	26	29	26	28
New technologies like bio-or nano-technologies are more dangerous as expected in 2008	28	28	27	29	29	24
The crime rate of foreigners / immigrants doubles the crime rate of natives	17	17	1 <i>7</i>	14	18	18
Many people wear a chip for identification and localisation	15	15	16	18	16	11
European / international data transfer helps to solve crime faster, people feel more secure than today	14	15	13	14	15	13
None of these statements will have come true	5	6	5	5	4	8

Family Question: What do you think, which of the following statements will have come true by the year 2030?	Total population female		male	16- 34 years	35 – 54 years	55 + years
Most couples live together without being married	45	46	44	46	47	39
The compatibility of work and family (work-life-balance) is possible for many women	32	37	27	31	34	32
Women have two children on average	32	36	28	33	34	29
Because of the aging society more and more day care centres for senior citizens (like day-care facilities for children) open	24	24	23	24	21	27
Every third partnership/ cohabitation/marriage results from internet-dating-networks	21	23	19	26	21	13
Same-gender couples are allowed to get married and to adopt children	21	22	20	23	21	16
Sex, hair colour and size of children can be selected in case of artificial insemination	20	22	18	24	20	12
Family members bear the financial responsibility for the oldage pensions of their parents/grand parents	18	17	18	16	22	14
There are more people older than 60 than people younger than 30 sharing flats	16	15	16	13	15	20
Because of the large number of older citizens and the consideration of younger people's interests at the same time the votes of citizens under the age of 50 count double in elections	10	11	9	9	9	12
None of these statements will have come true	8	5	10	7	8	8

Environment Question: What do you think, which of the following statements will have come true by the year 2030?	Total population	female	male	16- 34 years	35 – 54 years	55 + years
Clean drinking water is a luxury item in Europe	45	46	44	41	48	46
Pollution of the environment is no. 1 cause of death	39	39	39	39	39	40
Most trash is recycled	34	35	34	36	35	31
Because of high energy costs rent for a flat including utilities is double the rent without utilities	29	30	27	25	30	33
More people live outside of big cities in order to escape environmental impacts in the inner cities	27	29	25	27	29	24
Solar- and wind-energy account for more than half of the energy production	23	22	25	27	22	18
The problem of climate change has been solved due to technical developments	18	16	19	21	18	12
Hunger is not an issue due to genetically modified food	1 <i>7</i>	17	17	19	16	15
Meteorological stations generate rain, sun or snow where it is required	16	15	18	16	17	15
A large part of the population in developing countries has to starve because more plants a grown for regenerative energy than for food supply	12	12	11	10	11	15
None of these statements will have come true	7	7	7	6	6	8

Consumption Question: What do you think, which of the following statements will have come true by the year 2030?	Total population	female	male	16- 34 years	35 – 54 years	55 + years
Everyday products (e.g. food) are significantly more expensive	49	50	48	46	52	49
The biggest part of consumer spending is spent in the health sector	32	32	31	28	33	36
Most people buy eco-friendly products (green products)	24	26	21	28	24	18
Most food products are produced domestically (in the own country)	24	25	22	21	25	25
Most consumer goods are purchased online (Internet)	23	21	25	27	23	15
Luxury means time and tranquillity	21	22	20	23	23	1 <i>7</i>
Most households have at least two cars	19	20	18	25	17	15
More than half of all products come from Asia	18	16	20	19	19	16
Most consumer goods (cars, TV, clothes) are leased and not bought	17	17	17	17	17	17
Service and advise are more important than a low price	13	13	13	15	14	11
None of these statements will have come true	6	6	6	6	5	8

Integration Question: What do you think, which of the following statements will have come true by the year 2030?	Total population	female	male	16- 34 years	35 – 54 years	55 + years
More immigrants from developing countries than immigrants from EU countries come to Russia	27	25	30	26	28	26
In Europe one third of partnerships/cohabitations/ marriages are multinational/ multicultural	24	26	23	25	25	22
Portable devices and telephones with simultaneous translation make communication easy	24	24	23	27	25	1 <i>7</i>
The integration of immigrants is easier	22	22	23	22	24	20
Because of the cultural diversity there are conflicts between single groups (e.g. Muslims, Africans, Turks)	20	21	20	18	22	23
Faith and religion play an important role in immigration politics	19	20	18	18	21	18
Most immigrants live among each other in certain districts	17	18	17	19	18	14
In most European countries integration works only with educated immigrants	17	17	16	17	17	16
None of these statements will have come true	16	16	15	13	16	18
Many European countries encourage immigration in order to counteract the aging of society	15	16	15	14	14	19
In order to counteract people's fears Europe has closed its borders for Non-Europeans	15	14	16	15	18	11

Work Question: What do you think, which of the following statements will have come true by the year 2030?	Total population	female	male	15- 34 years	35 – 54 years	55 + years
Many employees have second or side jobs	48	48	48	50	49	45
Most employees have to work up to the age of 75	37	38	36	36	40	34
Production of goods takes mainly place in developing countries	23	21	26	25	28	16
The 10 biggest European companies employ more than half of the European workforce	23	21	25	25	26	18
Leisure time is more important for employees than a good salary	22	22	22	24	25	17
Because of automation most people work less than 25 hours a week	22	22	22	23	22	20
Identification/empathy with the employer is low	20	18	21	24	25	10
Every full-time employee has worked at least once abroad	17	18	16	20	18	14
Many employees receive dwelling, food, payments for pension funds and pocket money for their disposal instead of a salary	14	11	16	17	14	10
Full employment is possible because of the declining population	12	11	13	13	12	10
None of these statements will have come true	11	10	13	10	9	15

Relationship between poor and rich Question: What do you think, which of the following statements will have come true by the year 2030?	Total population	female	male	15-34 years	35 – 54 years	55 + years
Old age poverty is an unsolved problem	55	57	53	50	54	60
Many employees do not earn enough to save money for retirement	52	51	53	50	52	54
The gap between poor and rich has become wider in Spain	49	47	51	50	51	47
Life expectancy of rich people is much higher than life expectancy of poor people	38	37	38	38	39	36
The middle class has almost disappeared	25	26	24	23	29	24
The gap between industrialised nations and developing countries has become smaller	17	18	17	20	20	12
Educational programs provide children from common families with the same educational opportunities as children from academic families	17	16	18	19	18	14
The higher the income the more children the Spain are able to "afford"	17	17	17	21	20	10
The government guaranties a minimum income for all – independent of age, gender, origin etc.	14	15	14	16	15	13
The income of top managers has declined	11	13	9	12	15	6
None of these statements will have come true	7	7	7	7	6	8

Education Question: What do you think, which of the following statements will have come true by the year 2030?	Total population	female	male	15- 34 years	35 – 54 years	55 + years
More and more highly qualified women assume leading management jobs	54	56	52	54	60	49
Most Europeans speak at least 2 languages fluently	49	48	50	53	52	41
One fourth of the young employees work in professions which did not yet exist in 2008	34	32	35	37	36	28
Online-lectures are given simultaneously by the best professors at different universities	30	26	33	39	33	16
There are more private schools than public schools in Spain	28	28	29	32	27	26
A system to detect special abilities develops many children starting already in kindergarten	22	24	19	25	24	17
Media are responsible for 1/3 of education and broadcast special educational programs for this purpose	19	18	20	20	22	16
Talent scouts look for new recruits for big companies already in elementary schools	1 <i>7</i>	15	18	18	18	14
At least one further training per year is standard for each employee	16	13	20	19	22	9
Informal education (e.g. self-development) is more important than formal education (e.g. school education)	16	14	18	18	21	8
None of these statements will have come true	10	8	12	5	8	1 <i>7</i>

Security Question: What do you think, which of the following statements will have come true by the year 2030?	Total population	female	male	15- 34 years	35 – 54 years	55 + years
Organised crime is a big problem in all European countries	47	44	51	45	53	43
Internet related crime has increased very much	45	43	46	48	50	36
Warlike conflicts about natural resources like oil, gas or water take place	42	41	43	46	47	32
Penalties for criminal acts are higher	37	39	35	35	35	40
The crime rate of foreigners / immigrants doubles the crime rate of natives	37	38	35	33	38	39
Surveillance computers identify many criminals directly when committing a crime	33	31	34	35	37	24
For many people security is more important than their own privacy	31	31	30	31	36	25
Many people wear a chip for identification and localisation	26	21	31	31	28	18
New technologies like bio-or nano-technologies are more dangerous as expected in 2008	22	18	27	28	26	13
European / international data transfer helps to solve crime faster, people feel more secure than today	20	17	24	25	22	14
None of these statements will have come true	7	8	6	5	5	10

Family Question: What do you think, which of the following statements will have come true by the year 2030?	Total population	female	male	15- 34 years	35 – 54 years	55 + years
Most couples live together without being married	61	61	61	59	60	63
Same-gender couples are allowed to get married and to adopt children	52	54	49	56	51	47
Because of the aging society more and more day care centres for senior citizens (like day-care facilities for children) open	36	37	35	37	39	33
Sex, hair colour and size of children can be selected in case of artificial insemination	36	37	34	44	35	27
Women have two children on average	35	36	34	33	38	34
The compatibility of work and family (work-life-balance) is possible for many women	29	29	29	31	33	23
There are more people older than 60 than people younger than 30 sharing flats	29	30	28	25	31	30
Family members bear the financial responsibility for the oldage pensions of their parents/grand parents	26	25	27	30	26	21
Every third partnership/ cohabitation/marriage results from internet-dating-networks	21	19	22	27	23	12
Because of the large number of older citizens and the consideration of younger people's interests at the same time the votes of citizens under the age of 50 count double in elections	10	10	10	11	9	11
None of these statements will have come true	8	8	8	7	6	11

Environment Question: What do you think, which of the following statements will have come true by the year 2030?	Total population	female	male	15- 34 years	35 – 54 years	55 + years
Most trash is recycled	57	59	55	61	57	54
Clean drinking water is a luxury item in Europe	44	45	43	41	46	46
Solar- and wind-energy account for more than half of the energy production	36	34	39	40	40	29
More people live outside of big cities in order to escape environmental impacts in the inner cities	33	31	36	35	37	28
Pollution of the environment is no. 1 cause of death	31	30	31	30	35	26
Because of high energy costs rent for a flat including utilities is double the rent without utilities	30	28	33	33	32	26
A large part of the population in developing countries has to starve because more plants a grown for regenerative energy than for food supply	21	19	23	23	23	17
Meteorological stations generate rain, sun or snow where it is required	13	14	13	14	13	13
Hunger is not an issue due to genetically modified food	13	10	16	17	13	9
The problem of climate change has been solved due to technical developments	12	13	12	14	14	9
None of these statements will have come true	6	6	6	4	5	11

Consumption Question: What do you think, which of the following statements will have come true by the year 2030?	Total population	female	male	15- 34 years	35 – 54 years	55 + years
Everyday products (e.g. food) are significantly more expensive	53	52	54	54	54	52
Most households have at least two cars	44	42	47	46	49	38
More than half of all products come from Asia	36	34	37	39	37	30
Most consumer goods are purchased online (Internet)	35	34	36	43	38	23
Luxury means time and tranquillity	28	28	29	33	32	19
Most people buy eco-friendly products (green products)	28	26	30	31	31	22
The biggest part of consumer spending is spent in the health sector	20	19	21	20	21	20
Most food products are produced domestically (in the own country)	20	21	18	21	18	20
Most consumer goods (cars, TV, clothes) are leased and not bought	19	18	20	22	18	16
Service and advise are more important than a low price	16	15	18	18	20	10
None of these statements will have come true	6	7	5	5	4	9

Integration Question: What do you think, which of the following statements will have come true by the year 2030?	Total population	female	male	15- 34 years	35 – 54 years	55 + years
Because of the cultural diversity there are conflicts between single groups (e.g. Muslims, Africans, Turks)	39	36	43	38	44	37
More immigrants from developing countries than immigrants from EU countries come to Spain	38	38	38	38	42	34
Portable devices and telephones with simultaneous translation make communication easy	37	34	40	43	43	23
Most immigrants live among each other in certain districts	36	36	36	38	39	31
The integration of immigrants is easier	32	31	33	37	35	22
In Europe one third of partnerships/cohabitations/ marriages are multinational/ multicultural	26	25	28	27	33	18
Many European countries encourage immigration in order to counteract the aging of society	24	23	26	26	27	19
In most European countries integration works only with educated immigrants	20	19	20	25	21	13
In order to counteract people's fears Europe has closed its borders for Non-Europeans	20	19	20	20	20	18
Faith and religion play an important role in immigration politics	17	18	16	16	19	17
None of these statements will have come true	8	9	7	6	5	14

Work Question: What do you think, which of the following statements will have come true by the year 2030?	Total population	female	male	15- 34 years	35 – 54 years	55 + years
Many employees have second or side jobs	<i>7</i> 1	71	72	67	77	68
Production of goods takes mainly place in developing countries	52	52	52	51	54	50
Most employees have to work up to the age of 75	45	45	44	44	47	42
Identification/empathy with the employer is low	42	38	45	40	43	43
The 10 biggest European companies employ more than half of the European workforce	34	35	34	32	34	37
Every full-time employee has worked at least once abroad	29	29	28	28	28	29
Leisure time is more important for employees than a good salary	28	28	28	25	30	30
Full employment is possible because of the declining population	26	28	24	23	27	28
Because of automation most people work less than 25 hours a week	19	19	19	20	18	20
Many employees receive dwelling, food, payments for pension funds and pocket money for their disposal instead of a salary	14	15	14	15	14	14
None of these statements will have come true	2	2	2	1	2	4

Relationship between poor and rich Question: What do you think, which of the following statements will have come true by the year 2030?	Total population	female	male	15- 34 years	35 – 54 years	55 + years
Old age poverty is an unsolved problem	76	74	78	74	76	79
The gap between poor and rich has become wider in Switzerland	75	73	77	72	76	76
Many employees do not earn enough to save money for retirement	69	70	68	63	71	73
The middle class has almost disappeared	68	68	69	64	73	65
Life expectancy of rich people is much higher than life expectancy of poor people	49	48	50	43	53	49
The income of top managers has declined	29	29	30	22	32	34
The government guaranties a minimum income for all – independent of age, gender, origin etc.	29	30	28	28	30	29
Educational programs provide children from common families with the same educational opportunities as children from academic families	28	29	26	26	27	30
The gap between industrialised nations and developing countries has become smaller	25	24	26	24	24	29
The higher the income the more children the Swiss are able to "afford"	22	23	22	21	25	20
None of these statements will have come true	1	1	1	1	1	1

Education  Question: What do you think, which of the following statements will have come true by the year 2030?	Total population	female	male	15- 34 years	35 – 54 years	55 + years
More and more highly qualified women assume leading management jobs	75	74	75	71	75	79
Most Europeans speak at least 2 languages fluently	<i>7</i> 1	72	71	70	71	73
Online-lectures are given simultaneously by the best professors at different universities	56	53	58	57	55	55
At least one further training per year is standard for each employee	52	51	53	47	53	56
One fourth of the young employees work in professions which did not yet exist in 2008	51	52	50	48	52	54
A system to detect special abilities develops many children starting already in kindergarten	49	49	48	43	51	52
Talent scouts look for new recruits for big companies already in elementary schools	41	41	41	40	42	40
There are more private schools than public schools in Switzerland	38	39	37	39	39	35
Media are responsible for 1/3 of education and broadcast special educational programs for this purpose	32	33	30	29	33	33
Informal education (e.g. self-development) is more important than formal education (e.g. school education)	31	30	32	31	29	33
None of these statements will have come true	1	1	1	1	1	1

Security Question: What do you think, which of the following statements will have come true by the year 2030?	Total population	female	male	15- 34 years	35 – 54 years	55 + years
Internet related crime has increased very much	77	74	80	71	81	77
Organised crime is a big problem in all European countries	73	73	73	67	76	77
Warlike conflicts about natural resources like oil, gas or water take place	65	61	69	60	67	67
Penalties for criminal acts are higher	58	57	58	57	59	56
Surveillance computers identify many criminals directly when committing a crime	55	55	54	53	56	55
The crime rate of foreigners / immigrants doubles the crime rate of natives	54	54	55	51	55	58
European / international data transfer helps to solve crime faster, people feel more secure than today	49	50	49	41	54	53
New technologies like bio-or nano-technologies are more dangerous as expected in 2008	40	39	41	38	40	43
For many people security is more important than their own privacy	36	37	36	33	35	44
Many people wear a chip for identification and localisation	34	31	37	33	34	35
None of these statements will have come true	1	1	1	1	0	1

Family Question: What do you think, which of the following statements will have come true by the year 2030?	Total population	female	male	15- 34 years	35 – 54 years	55 + years
Most couples live together without being married	77	76	78	79	77	74
Same-gender couples are allowed to get married and to adopt children	66	67	65	64	70	61
The compatibility of work and family (work-life-balance) is possible for many women	64	66	62	61	68	61
Every third partnership/ cohabitation/marriage results from internet-dating-networks	58	60	56	61	60	50
Because of the aging society more and more day care centres for senior citizens (like day-care facilities for children) open	56	55	56	48	58	61
There are more people older than 60 than people younger than 30 sharing flats	49	48	50	41	53	52
Women have two children on average	40	45	36	38	40	45
Sex, hair colour and size of children can be selected in case of artificial insemination	38	39	36	38	39	34
Family members bear the financial responsibility for the oldage pensions of their parents/grand parents	32	33	32	29	36	30
Because of the large number of older citizens and the consideration of younger people's interests at the same time the votes of citizens under the age of 50 count double in elections	11	10	11	11	10	12
None of these statements will have come true	1	0	1	-	0	3

Environment Question: What do you think, which of the following statements will have come true by the year 2030?	Total population	female	male	15- 34 years	35 – 54 years	55 + years
Most trash is recycled	77	76	77	72	81	76
Solar- and wind-energy account for more than half of the energy production	60	61	58	55	64	58
Because of high energy costs rent for a flat including utilities is double the rent without utilities	55	55	55	50	60	52
Clean drinking water is a luxury item in Europe	54	56	53	48	57	58
More people live outside of big cities in order to escape environmental impacts in the inner cities	46	47	45	43	48	46
Pollution of the environment is no. 1 cause of death	44	42	47	40	46	47
A large part of the population in developing countries has to starve because more plants a grown for regenerative energy than for food supply	41	39	43	35	43	46
The problem of climate change has been solved due to technical developments	17	16	1 <i>7</i>	21	15	14
Hunger is not an issue due to genetically modified food	16	15	18	19	15	14
Meteorological stations generate rain, sun or snow where it is required	11	10	12	12	10	11
None of these statements will have come true	1	1	-	0	1	-

Consumption Question: What do you think, which of the following statements will have come true by the year 2030?	Total population	female	male	15- 34 years	35 – 54 years	55 + years
Everyday products (e.g. food) are significantly more expensive	77	76	78	73	79	79
Most consumer goods are purchased online (Internet)	56	56	56	60	59	45
More than half of all products come from Asia	55	55	55	50	57	58
Luxury means time and tranquillity	55	54	55	56	53	55
Most consumer goods (cars, TV, clothes) are leased and not bought	51	51	51	47	54	50
The biggest part of consumer spending is spent in the health sector	46	45	47	39	47	52
Most households have at least two cars	42	45	40	42	42	43
Most people buy eco-friendly products (green products)	35	35	34	29	36	39
Service and advise are more important than a low price	30	30	30	26	29	37
Most food products are produced domestically (in the own country)	20	20	19	14	23	21
None of these statements will have come true	0	0	0	0	1	0

Integration Question: What do you think, which of the following statements will have come true by the year 2030?	Total population	female	male	15- 34 years	35 – 54 years	55 + years
In Europe one third of partnerships/cohabitations/ marriages are multinational/ multicultural	70	71	70	68	72	71
Because of the cultural diversity there are conflicts between single groups (e.g. Muslims, Africans, Turks)	63	63	62	58	65	66
Portable devices and telephones with simultaneous translation make communication easy	58	58	58	55	59	61
Most immigrants live among each other in certain districts	53	50	56	47	54	60
Faith and religion play an important role in immigration politics	46	46	46	39	47	54
In most European countries integration works only with educated immigrants	44	41	47	37	46	52
More immigrants from developing countries than immigrants from EU countries come to Switzerland	42	42	41	35	44	47
The integration of immigrants is easier	38	39	37	36	39	37
Many European countries encourage immigration in order to counteract the aging of society	30	32	27	22	32	35
In order to counteract people's fears Europe has closed its borders for Non-Europeans	21	18	24	20	23	19
None of these statements will have come true	2	3	2	3	2	2

Work Question: What do you think, which of the following statements will have come true by the year 2030?	Total population	female	male	16- 34 years	35 – 54 years	55 + years
Most employees have to work up to the age of 75	64	67	60	64	66	62
Many employees have second or side jobs	45	51	39	44	48	43
Production of goods takes mainly place in developing countries	32	30	35	28	33	36
The 10 biggest European companies employ more than half of the European workforce	21	22	20	16	26	22
Identification/empathy with the employer is low	19	18	20	18	22	17
Leisure time is more important for employees than a good salary	18	18	19	15	19	21
Because of automation most people work less than 25 hours a week	17	17	17	10	15	26
Every full-time employee has worked at least once abroad	11	12	10	15	9	11
Full employment is possible because of the declining population	10	11	9	11	11	9
Many employees receive dwelling, food, payments for pension funds and pocket money for their disposal instead of a salary	8	9	8	10	9	6
None of these statements will have come true	6	5	8	7	5	7

Relationship between poor and rich Question: What do you think, which of the following statements will have come true by the year 2030?	Total population	female	male	16- 34 years	35 – 54 years	55 + years
The gap between poor and rich has become wider in UK	61	60	62	57	62	62
Many employees do not earn enough to save money for retirement	55	57	52	50	60	55
Old age poverty is an unsolved problem	50	49	51	40	53	55
Life expectancy of rich people is much higher than life expectancy of poor people	40	39	42	34	43	44
The middle class has almost disappeared	25	23	26	26	23	25
The gap between industrialised nations and developing countries has become smaller	20	16	24	15	20	25
The government guaranties a minimum income for all – independent of age, gender, origin etc.	17	18	16	19	16	16
Educational programs provide children from common families with the same educational opportunities as children from academic families	15	18	12	14	15	17
The higher the income the more children the English are able to "afford"	15	18	13	19	16	12
The income of top managers has declined	7	7	7	6	7	9
None of these statements will have come true	5	5	4	6	2	7

Education Question: What do you think, which of the following statements will have come true by the year 2030?	Total population	female	male	16- 34 years	35 – 54 years	55 + years
More and more highly qualified women assume leading management jobs	47	47	48	45	46	51
Most Europeans speak at least 2 languages fluently	44	45	42	42	43	46
Online-lectures are given simultaneously by the best professors at different universities	33	33	34	35	37	29
One fourth of the young employees work in professions which did not yet exist in 2008	30	34	25	22	30	36
Talent scouts look for new recruits for big companies already in elementary schools	26	24	28	24	29	25
At least one further training per year is standard for each employee	25	25	25	25	23	27
There are more private schools than public schools in UK	24	27	22	28	21	24
A system to detect special abilities develops many children starting already in kindergarten	23	26	20	20	25	24
Informal education (e.g. self-development) is more important than formal education (e.g. school education)	19	19	19	22	21	14
Media are responsible for 1/3 of education and broadcast special educational programs for this purpose	18	18	18	15	18	21
None of these statements will have come true	7	7	7	5	7	10

Security Question: What do you think, which of the following statements will have come true by the year 2030?	Total population	female	male	16- 34 years	35 – 54 years	55 + years
Organised crime is a big problem in all European countries	56	57	55	41	60	66
Internet related crime has increased very much	56	56	56	49	60	58
Warlike conflicts about natural resources like oil, gas or water take place	53	50	56	48	57	55
Surveillance computers identify many criminals directly when committing a crime	32	34	31	29	34	35
For many people security is more important than their own privacy	32	32	32	31	31	33
The crime rate of foreigners / immigrants doubles the crime rate of natives	31	32	31	28	34	32
Many people wear a chip for identification and localisation	31	31	31	36	32	25
Penalties for criminal acts are higher	27	25	29	27	27	27
New technologies like bio-or nano-technologies are more dangerous as expected in 2008	22	21	23	23	20	22
European / international data transfer helps to solve crime faster, people feel more secure than today	19	19	20	16	18	24
None of these statements will have come true	3	4	3	4	2	5

Family Question: What do you think, which of the following statements will have come true by the year 2030?	Total population	female	male	16- 34 years	35 – 54 years	55 + years
Most couples live together without being married	63	63	64	66	66	58
Same-gender couples are allowed to get married and to adopt children	52	56	47	54	60	42
Because of the aging society more and more day care centres for senior citizens (like day-care facilities for children) open	37	40	35	28	37	46
Women have two children on average	34	35	33	33	32	36
Family members bear the financial responsibility for the oldage pensions of their parents/grand parents	32	35	30	28	37	31
Sex, hair colour and size of children can be selected in case of artificial insemination	30	32	27	32	36	22
The compatibility of work and family (work-life-balance) is possible for many women	26	28	23	26	26	25
There are more people older than 60 than people younger than 30 sharing flats	24	26	23	15	27	30
Every third partnership/ cohabitation/marriage results from internet-dating-networks	19	18	19	21	21	14
Because of the large number of older citizens and the consideration of younger people's interests at the same time the votes of citizens under the age of 50 count double in elections	7	8	6	6	6	9
None of these statements will have come true	4	4	5	5	3	6

Environment Question: What do you think, which of the following statements will have come true by the year 2030?	Total population	female	male	16- 34 years	35 – 54 years	55 + years
Most trash is recycled	64	66	61	65	60	66
Solar- and wind-energy account for more than half of the energy production	39	41	36	36	39	41
Because of high energy costs rent for a flat including utilities is double the rent without utilities	32	32	31	30	38	27
More people live outside of big cities in order to escape environmental impacts in the inner cities	30	33	27	31	33	26
Clean drinking water is a luxury item in Europe	23	26	21	24	21	25
A large part of the population in developing countries has to starve because more plants a grown for regenerative energy than for food supply	23	24	22	19	23	26
Pollution of the environment is no. 1 cause of death	22	24	19	23	20	22
The problem of climate change has been solved due to technical developments	13	14	13	16	11	13
Hunger is not an issue due to genetically modified food	11	11	12	8	11	14
Meteorological stations generate rain, sun or snow where it is required	7	8	6	5	8	9
None of these statements will have come true	6	5	8	5	5	8

Consumption Question: What do you think, which of the following statements will have come true by the year 2030?	Total population	female	male	16- 34 years	35 – 54 years	55 + years
Everyday products (e.g. food) are significantly more expensive	73	76	71	69	72	79
Most consumer goods are purchased online (Internet)	53	53	54	55	56	49
Most households have at least two cars	42	45	38	41	43	41
More than half of all products come from Asia	34	31	36	27	35	39
Most people buy eco-friendly products (green products)	28	31	25	31	28	27
Luxury means time and tranquillity	20	21	19	16	22	21
Most consumer goods (cars, TV, clothes) are leased and not bought	19	19	19	22	19	15
The biggest part of consumer spending is spent in the health sector	16	18	14	15	18	16
Most food products are produced domestically (in the own country)	13	15	10	12	11	16
Service and advise are more important than a low price	13	14	11	10	12	16
None of these statements will have come true	3	2	3	3	1	4

Integration Question: What do you think, which of the following statements will have come true by the year 2030?	Total population	female	male	16- 34 years	35 – 54 years	55 + years
Most immigrants live among each other in certain districts	43	42	44	36	42	51
Because of the cultural diversity there are conflicts between single groups (e.g. Muslims, Africans, Turks)	43	40	46	35	47	47
More immigrants from developing countries than immigrants from EU countries come to UK	40	43	37	37	41	43
Portable devices and telephones with simultaneous translation make communication easy	34	34	33	34	36	31
Faith and religion play an important role in immigration politics	27	25	30	29	22	31
The integration of immigrants is easier	27	27	26	31	28	21
In Europe one third of partnerships/cohabitations/ marriages are multinational/ multicultural	25	30	21	26	25	25
In most European countries integration works only with educated immigrants	16	16	16	12	15	20
In order to counteract people's fears Europe has closed its borders for Non-Europeans	16	14	18	9	17	21
Many European countries encourage immigration in order to counteract the aging of society	16	14	18	12	16	18
None of these statements will have come true	7	7	7	7	5	9

# **Europe in Numbers**

	1	1	1	T	T	T	T	T	
	Austria	Finland	France	Germany	Italy	Russia	Spain	Switzerland	United Kingdom
SOCIAL STRUCTURE									
Illiterates in % (Pop. over 14 years)	0,9	0,0	1,0	0,7	1,3	0,4	2,1	0,4	1,0
Foreigner quota in %	11,9	2,2	5,8	8,8	4,6	20,2	9,3	20,5	5,7
Population in Million	8,2	5,2	60,9	82,4	58,1	142,9	40,4	7,5	60,6
Population 0-14 years in %	15,4	17,1	18,3	14,1	13,8	14,2	14,4	16,3	17,5
Population over 65 years in %	17,1	16,2	16,4	19,5	19,7	14,5	17,8	15,6	15,7
Population growth in %	0,09	0,14	0,35	-0,02	0,04	-0,35	-0,13	0,43	0,28
Average age	40,9	41,3	39,1	42,6	42,2	38,4	39,9	40,1	39,3
Fertility rate	1,36	1,73	1,84	1,39	1,28	1,28	1,28	1,43	1,66
Life expectancy (women)	82,1	82,2	83,5	82,0	82,9	74,1	83,2	83,5	81,1
Life expectancy (men)	76,2	75,0	76,1	75,8	76,9	60,5	76,3	77,7	76,1
Urbanisation in %	66,9	84,7	76,4	88,9	67,7	73,3	77,2	67,8	89,3
	1	1	1	1	1	1	1	1	
INFRASTRUCTURE									
Physicians per 1,000 citizens	2,28	3,21	3,68	3,73	6,14	4,85	3,57	3,57	1,82
Computer per 1,000 citzizens	503	533	386	603	313	129	312	758	496
Electriciy consumption (KWh) per									
citizen	8158	15408	7424	6200	5302	5684	6064	7809	5853
Oil consumption (Barrel per year per									
citizen)	11,45	15,6	12,7	11,9	11,9	7,4	14,24	13,2	10,6
TV sets per 1,000 citizens	568	778	649	743	527	467	725	645	661
Internet useers per 1,000 citizens	630	688	425	679	418	150	384	512	437
Mobile phones per 1,000 citzizens	913	887	708	842	979	277	955	955	869
Cars per 1,000 citzizens	507	472	500	573	605	170	516	526	465
Radios per 1000 citizens	749	1623	922	947	889	435	436	970	1407
Landline telephones per 1,000 citizens	491	556	578	670	517	262	440	759	585
FCONIONAIC DATA		l	l						
ECONOMIC DATA									
Contribution of manufacturing output	24.0				20.2		20.4		212
to GDP(%)	31,2	29,4	22,0	29,4	30,3	38,8	30,1	k.A.	24,2
Contribution of services to GDP (%)  Contribution of agriculture to GDP (%)	67,1	67,6	75,8	69,7	67,7	56,1	66,1	k.A.	75,2
	1,7	3,0	2,2	0,9	2,0	5,1	3,8	k.A.	0,6
Unemployment rate in %	5,5	8,1	9,6	9,7	7,5	6,8	8,8	3,9	4,6
Foreign debt (in \$ billion)  GDP per citizen in \$	547	222	2908	3886	964	146	1093	864	7297
Exports (in \$ billion)	37033	38249	33901	36646	29542	4673	27810	46978	36240
Gold and currency reserves (in \$	143	74	508	1193	408	291	214	167	413
billion)	11	10	74	105	67	260	22	FF	40
Imports (in \$ billion)	11 132	12 <b>64</b>	74 540	105 <b>882</b>	405	<b>268</b> 157	22 294	55 150	49 522
Rate of inflation in %	2,5	0,8	1,9	1,9	2,1	12,2	3,7	1,4	2,0
Value of one US dollar	0,92	0,84	0,91	0,87	1,03	2,59	0,98	0,70	0,86
National budget expenditure (in \$	0,92	0,04	0,91	0,07	1,03	2,37	0,50	0,70	0,00
billion)	153	103	1189	1453	903	162	492	145	984
National budget income (in \$ billion)	148	103	1137	1304	803	217	486	140	929
National debt (\$) per citizen	24701	14190	22171	18726	32556	476	10957	24146	16525
Defence expenditure (in \$ million)	2518	2724	45000	42283	33086	52448	12584	4011	52887
2 5.5.766 experience (iii \$ 11iiiioii)	2310	Z/Z7	T3000	72203	33000	32770	12307	7011	J2007

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Pierre-Alain Schieb is Counsellor in the Advisory Unit to the Secretary General of the OECD, which manages the International Futures Programme. He is in charge of International Futures Network, and is Head of OECD Futures Projects such as the ongoing project on The Commercialisation of Space and the Development of Space Infrastructure, the project on Risk Management Policies in Selected OECD Countries and the upcoming Global Infrastructure Needs.

Pierre-Alain Schieb earned a Ph.D (Doctorat d'Etat) in management science from the University of Strasbourg (1981), a DBA in economics and business administration from the University of Aix-en-Provence (1974), a M.Sc in quantitative marketing from the University of Sherbrooke (Canada). And he has received numerous distinctions.

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### **Rohit Talwar**

Rohit Talwar is member of the advisory board of the European Futurists Conference Lucerne.

Rohit Talwar is the CEO of a research and consulting organisation specialising in futures and strategic innovation and is widely regarded as one of Europe's leading professional speakers on the themes of futures, strategy, innovation and change.

Rohit facilitated the consultation for the MoD's (Ministry of Defence) recently published Strategic Trends 2030 programme and is a popular speaker with Defence Audiences on both sides of the Atlantic. He is currently running a £2M futures research programme for UK government including a study to identify the 100 critical global trends shaping the next 20 years.

He was lead author and editor of the acclaimed book - Achieving Transformation and Renewal in Financial Services. Rohit also designed of the BBC Video series - Reengineering the Business.

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#### Wendy L. Schultz

Dr. Wendy L. Schultz is member of the advisory board of the European Futurists Conference Lucerne.

Dr. Wendy L. Schultz is Director of Infinite Futures: Foresight Research, Training, and Facilitation, with over two decades of foresight practice from Honolulu to Helsinki, and Brisbane to Budapest.

Her current research and speaking topics include an overview of trends and emerging issues of change drawn from current work assembling a baseline environmental scan for the UK Department of Environment, Food, and Rural Affairs; the future of micro sensors and RFID as tools, toys, and toxins; the future of learning and higher education; the future of space and the future of undersea exploration (The Catalog of Tomorrow); and the future of libraries, archives, and media; among others.

Wendy is a Fellow of the World Futures Studies Federation, and a member of the Association of Professional Futurists.

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### Sokolov, Alexander

Dr. Alexander Sokolov is Deputy Director at the Institute for Statistical Studies and Economics of Knowledge, Higher School of Economics (HSE), Moscow and Director of the HSE Foresight Centre. He has been working in Foresight related area since 1997 when he managed a project on expert evaluation of the Russian critical technologies and national S&T priorities. Since then Dr. Sokolov was a project manager for several Foresight projects in Russia including selection of national critical technologies (2004-2005), Foresight for Republic of Bashkortostan (2005-2006), National S&T Delphi: 2025 (2007-2008), et al. He also participated as expert in a number of international projects implemented by the EU and UNIDO. Higher School of Economics, Moscow

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### Steinmüller, Karlheinz

Dr. Karlheinz Steinmüller is member of the Advisory Board of the European Futurists Conference Lucerne.

He is scientific director and founding partner of Z\_punkt GmbH – The Foresight Company at Essen and Berlin. Since 1991 engaged in future studies, he is leading studies for public administrations, for the European Commission and for large enterprises. His special fields of expertise include innovations in companies and society, technological foresight and technology assessment, and scenario development. He is member of the European Advisory Board of the Global Future Forum; chairman of the International Advisory Board of the Finland Futures Academy, member of the Collège Européen de Prospective Territoriale and other bodies.

Karlheinz obtained a physics diploma from Humboldt University Berlin and has graduated in philosophy. He has been engaged in modelling and simulation of ecological systems, and he has written four science fiction novels and numerous stories together with his wife.

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Prof. Dr. Markku Wilenius is a member of the advisory board of the European Futurists Conference Lucerne.

He has been appointed as Senior Vice President in Group Development to the Allianz group by December 1, 2007. And he acts also as a vicechair of the executive committee of the Finnish Consumer Agency.

He is professor of Futures Studies in Finland Futures Research Centre at the Turku School of Economics and also Docent in the University of Helsinki.

Wilenius' interests in research and development focus on the development of the society and foreseeing of development, visionary and strategic management of organisations in terms of their competence building as a way to "futurise" them, and sustainable development. From the spring 2005 on, he focuses on leading a large research project "Managing Creative Knowledge Capital" with major Finnish corporations. In 2002, he was appointed to the Club of Rome.

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### British American Tobacco's Foundation: "Stiftung für Zukunftsfragen"

British American Tobacco established the foundation "Stiftung für Zukunftsfragen" in May 2007 to continue the much acclaimed research activities of the "BAT Freizeit-Forschungsinstitu" (BAT Leisure Research Institute) which was founded in 1979. Under the direction of Scientific Head Professor Horst W. Opaschowski the foundation conducts scientific research into future issues and approaches to solving future social problems.

The "Stiftung für Zukunftsfragen" aims to make a contribution to the timely recognition of social challenges and to the development of constructive solutions. It is committed to conducting responsible research into our society's future based on a down-to-earth practical approach and the right measure of imaginativeness. The foundation hopes that its philosophy of "focusing on people in a changing world" will enable it to make a positive impact on future social developments and to provide useful pointers that can help us to prepare for the future. The foundation is an independent and impartial organisation.

### **European Futurists Conference Lucerne**

The European Futurists Conference Lucerne is the foremost independent annual gathering of futurists in Europe. Held for the first time in 2005, it is dedicated to imparting futures competence. It offers an exchange platform between European futurists on the one hand and decision makers in business and public authorities on the other. The international Advisory Board is composed of the directors of the most important academic and business-oriented futures research institutes in Europe. The European Futurists Conference Lucerne is a society based in Lucerne/Switzerland. Founder and Managing Director is futurist Georges T. Roos.

Businesses and public authorities need to be able to draw on reliable and plausible assumptions about the future. A number of companies have therefore developed a strategically oriented Corporate Foresight policy. The European Futurists Conference Lucerne supports practically relevant futures studies among other things by openly discussing adequate methods of anticipation, showing practical examples of successful implementation of futures knowledge and communicating new insights into future challenges and developments.