

# *Chapter 15*

## Challenges of the Global Information Society

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### Objective

This chapter looks at the serious challenges that are going on in the information society. Some of them will become acute by 2010 but all of them require imminent action if we are to respond to them successfully. When this review was originally written, particular emphasis was placed on the situation in Finland and Europe. This perspective remains in this revised version of the text to some degree, although most of the challenges are global.

For the purposes of this review, information society is understood in the broad sense of the word (as in Prof. Manuel Castells' and Dr. Pekka Himanen's theoretical studies; see Castells and Himanen 2002; for additional information, see Castells 2000a, 2000b, 2004;).

From a theoretical perspective, the key concepts include *network form of organisation* and *growth that is based on innovations*. Information economy relies on productivity growth based on innovations, unlike the hype of what is called the new economy. Several studies have shown that, during the past few years, growth has increasingly been generated by technological innovations combined with networked forms of organisation (Sichel 1997; Jorgenson and Stiroh 2000; Jorgenson and Yip 2000; Brynjolfsson and Hitt 2000; Castells 2001; Koski et al., 2002).

Networks are becoming increasingly common, and the role of innovations is growing, also in the labour market. Using Robert Reich's vocabulary, routine production jobs are declining, while the importance of symbolic analytical work and personal-service work is increasing (Reich 1991; for the changes in the labour market, see also Carnoy 2000; Benner 2002). In Richard Florida's vocabulary, the con-

cepts of creative and service jobs are close to symbolic-analytical work and personal-service work (Florida 2002). Creative/symbolic analytical jobs are specifically based on creative problem-solving (or the creative generation of new problems). However, the role of the creative component is also emphasised in jobs that are based on interaction. Creativity must be understood broadly: while creativity is an essential part of certain jobs that first come to mind, such as an artist's, researcher's or engineer's, it is also required, for example, in interaction between people and in jobs that involve manual skills.

This review comes to the conclusion that the most critical aspect in the development of the information *society* is the development of the deep-set structures of society, to which we must now pay close attention (cf. Castells and Himanen 2002). The information-society agenda is not the same as an *information network* or *Internet* programme. The development of technology will help only when it is combined with changes in the underlying structures. As the word "information society" usually first brings to mind technical (surface-level) matters, I would like to underline that the approach employed in this review is based on the need to change the deep structures, so topics that are mainly technical in nature, as important as they are, remain outside the scope of this review: Examples include broadband connections (e.g. public libraries as points of access to the network) and information security (e.g. viruses, spam, privacy protection).

This review is not a futurological study. The time perspective of this review covers trends that are already in progress (up to 2010) and to which we must react today if we are to respond to them successfully.

This review describes areas where action must be taken, yet it is not a practical implementation plan. The actions that are proposed in this review form a balanced entity: for example, the suggestions related to a creative economy require the creative welfare society if a balanced outcome is wanted.

## Global Trends

In the global development of the information society, we can identify ten major trends that are already in strong progress (building on Castells 2000a, 2000b, 2004; Himanen 2001, 2004b; Castells and Himanen 2002).

1. Increasing international tax competition
2. The new global division of labour
3. Population ageing
4. Increasing pressures on the welfare society
5. The second phase of the information society
6. The rise of cultural industries
7. The rise of bio-industries
8. Regional concentration
9. A deepening global divide
10. The spread of a "culture of emergency"

These trends can be described as follows:

### **1. Increasing international tax competition**

Countries compete for investments and skilled labour by reducing tax rates.

### **2. The new global division of labour**

Routine production moves to cheaper countries (the "China phenomenon"). China and India are particularly on the rise, and other emerging large countries include Indonesia, Pakistan, Russia and Brazil. The most developed countries cannot rely on routine jobs in the future, so they must specialise in creative work that is based on higher expertise and work to improve productivity both through increased added value and the development of production processes. At the same time, large developing countries whose role in the global market is increasing offer extensive markets for the products supplied by developed countries. This marks the next phase of economic growth.

### **3. Population aging**

Population aging is one of the most important trends in Europe and in some other regions. In these countries, population aging means a shift from the "society of the young" via the current "society of the middle-aged" to the "society of pensioners." This shift will already have taken place in many countries by 2010, when the labour force will be declining sharply.

#### **4. Increased pressures on the welfare state**

Population aging leads to problems in financing the welfare state, both because of an increase in direct expenses and a rising dependency ratio. At the same time, greater global tax competition and the new global division of labour put increased pressures on the welfare state. The welfare state can be maintained in the future only if its productivity is improved through innovations. The future of the welfare state is a creative welfare state.

#### **5. The second phase of the information society: from technological to social development**

The first phase of the information society focused on the development of technology, such as network connections. In the second phase, which has now begun, technological development will continue; however, the focus will shift to larger social matters and the main focus will be on changing the ways in which we work.

#### **6. The rise of cultural industries**

The information economy is expanding particularly in the field of culture, including music, TV, film, computer games, literature, design and learning materials. This process is affected by technological convergence, i.e. the digitalisation of content and the coupling of information technology, communication technology and media.

#### **8. The rise of bio-industries**

The next phase of the information society will see the rise of bio-industries. Genetic engineering will become another key technology besides IT. Medicine, biotechnology and welfare technology are other examples of emerging fields. The importance of these sectors is increased by population ageing (for example, gerontechnology, i.e. technology that makes life easier for the elderly).

##### Regional concentration

For the first time in history, the world's urbanisation rate has exceeded 50%. Large concentrations of expertise account for an increasing proportion of innovations and economy, as being at

the leading edge of global competition requires larger entities. Regional concentration continues and pressures on further concentration increase.

## **9. A deepening global divide**

If we carry on with “business as usual,” inequality and marginalisation will continue to become aggravated both globally and nationally. During the first phase of the information society, i.e. from the 1960s to the turn of the 21st century, the income gap between the poorest 20% and the richest 20% of the world’s population doubled and is now approximately 75:1. This development is maintained particularly by the distortions of world trade and the knowledge divide between developing and developed countries, so the situation can be improved considerably only by changing the structures of world trade and by bridging the information divide.

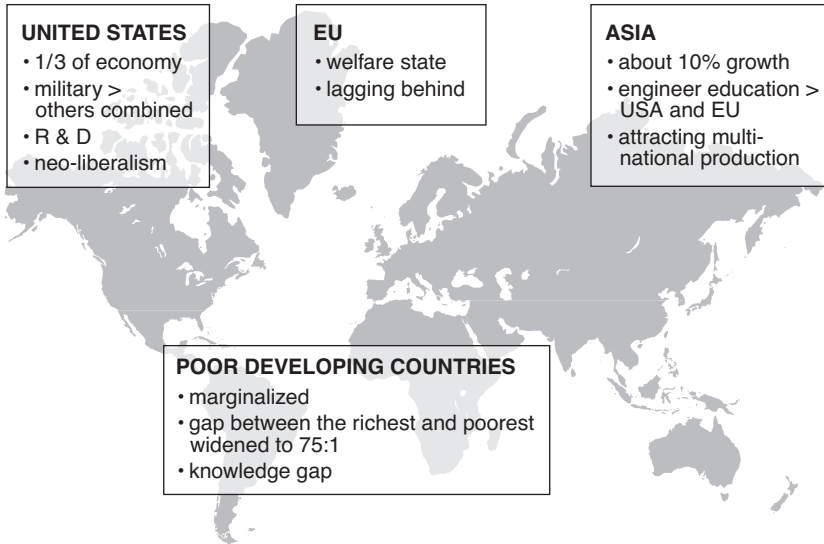
## **10. The spread of a “culture of emergency”**

The pace of development is accelerating, which increases the volatility of economies and creates a “culture of emergency” in workplaces. Deepening social gaps increase tensions, which in turn fuel the emergency culture. This trend is characterised by increasing instability. The challenge of achieving development that is sustainable in both human and environmental terms plays the pivotal role in such a risk society.

This above list of major trends is by no means meant to be an exhaustive description of all societally important developments, but it is one made from the limited aspect of the development of the information society.

## **Development Scenarios**

If we look at this development from the geographical perspective, it can be said that the fiercest competition is carried out by and between three leading regions: the United States, Asia and Europe (see Figure 15.1 below).

**Figure 15.1 Global Challenges to the Information Society**

On a global scale, Europe is currently at a disadvantage, while the US model clearly has the upper hand.

The United States alone accounts for one-third of the world's economy and half of the R&D work carried out in the world, and its military budget almost equals that of the rest of the world. Many Asian countries develop at an annual rate of almost 10%, and global production and markets are increasingly moving to Asia. In the IT field, for example, by 2010, half of the world's semiconductors are consumed and a third of them are produced in Asia (excluding Japan). For example, China currently produces more experts in science and technology than the EU or the United States (in 2000–2002: in China, 590,000; in the EU, 440,000; in the US, 385,000). A global market for expertise has emerged, where the development of Asia forms a completely new challenge to Europe. The EU clearly lags behind the United States, for example in terms of the region's attractiveness to Asian experts.

Allowing some simplification, there are currently three especially dynamic models in terms of technology and economy, yet they are based on very different social models. These can be called by the following titles (taking the representatives that are most often referred

to; for additional information, see Castells and Himanen 2002; Himanen and Castells 2004b; Wong 2004):

1. The “Silicon Valley model,” i.e. the American neo-liberalist model —the predominant model (United States)
2. The “Singapore model,” i.e. the Asian state-run model in which the objective is to attract multinational companies to the region —an emerging model (also in China and India)
3. The “Finnish model,” i.e. a European combination of the information society and the welfare state, which is represented in its most advanced form in the case of Finland.

Outside these regions and models, the status of the poorest developing countries continues to weaken. For example, most of the African countries between the Sahara and South Africa are becoming pauperised. One-fifth of the world’s population subsists on less than a dollar a day and has no access to health care or education. A continuously widening knowledge divide underlies the increasing welfare divide.

Each of the above models has currently problems that can be characterized with the following scenarios:

1. The Silicon Valley model refers to the neo-liberalist scenario of “*leaving the weak behind.*” Although this scenario is technologically and economically dynamic, it comes with a high social price. For example, the Silicon Valley area itself produced 60 millionaires a day at the end of the 1990s, but they had to move to fenced residential areas, because a society that leaves some of its citizens in the margin is a society of fear. One-fifth of the population lives below the poverty line, has no health insurance and is functionally illiterate. In Silicon Valley, the opportunities to receive education depend on the economic position of your family, so a class of marginalised people has emerged, for which crime is the only means of survival (particularly the sale of narcotics to those who have succeeded). Paradoxically, the world’s biggest proportion of the population that is in prison is in California, a leading region in terms of development! In addition, sending someone to prison for a year is more expensive for society than sending them to Harvard to study! The adoption of the Silicon Valley model would mean unfettered neo-liberalism.

2. The Singapore model is based on tax competition, i.e. “*a race to the bottom.*” This has also been a dynamic model, although the limitations and problems of competition have recently become evident. As other countries can always reduce their tax rates more in order to attract multinational companies, production keeps moving to cheaper and cheaper countries. In the case of Singapore, companies have moved, for example, to China and India. The outlook is not good in the long run if the region has not developed adequate local expertise and innovativeness, exactly what has happened in the Singapore case. If a region is to succeed in competition in the long run, it must have innovative ability; it is not sufficient that the government takes action to attract multinational companies. (The Singapore model is also patronising, which is another problem: the government attempts to control its citizens’ freedom, although the information society cannot be creative if people do not have free access to information and the freedom to think otherwise. This is a great paradox also for China, which idealises the Singapore model.)
  
3. The third scenario, i.e. the current European combination of the information society and the welfare state, has the danger of “*the dead hand of passivity.*” According to this scenario, people keep protecting all the industrial era structures of the welfare state, but they do not recognise that the future of the welfare state is only possible if the welfare state is reformed with the same kind of innovativeness that the information economy has gone through. In practice, passivity leads to a situation where welfare needs to be cut back more and more and the dynamics of the economy fades. People protect their own vested interests and envy other people for the benefits that they get. This can also be called the society of envy.

Fortunately, there is a fourth scenario. It is possible to combine the welfare state and the information society also in the future if only we have courage to revise this model appropriately. Therefore, under the current circumstances, the welfare state is best defended by those who speak for its reform through innovation. The fall of the welfare state can be prevented by moving from a reactive to a proactive policy: we should no longer focus on reacting to something that has already happened; instead we should act beforehand and boldly lead the way.



## The values of the reform of the European model

The following list describes the values which could serve as the basis for the continued combination of the welfare state and the information society. They are updated versions of the values underlying the original European welfare state and innovative entrepreneurialism. A successful reform requires from politicians value-based management.

1. Caring
2. Confidence
3. Communalism
4. Encouragement
5. Freedom
6. Creativity
7. Courage
8. Visionariness
9. Balance
10. Meaningfulness

The content of the values can be briefly described as follows:

### 1. Caring

Caring is the old principle of equality (*égalité*, in the traditions of the Enlightenment, and justice, of the classical period). It can also be called fairness or the inclusion of all. Caring means that we work to create equal opportunities for all. This is the key idea of the welfare state. In the global development, it means that we protect the equal opportunities of all the people in the world. The word “caring” is used in this context on purpose, to emphasise everyone’s responsibility for caring for other people (in the Christian tradition, this value is referred to as *caritas*). The idea of this value in a nutshell is as follows: “Imagine a situation similar to ours, except that our roles are reversed.”

### 2. Confidence

Confidence is partly based on caring, yet it deserves to be classified as a value in its own right. It is also a basis of the welfare state. Confidence gives safety and makes fruitful communalism possible. The lack of caring and confidence creates an atmosphere of fear.

## 2. Communality

Communality is the old value of fraternity (the *fraternité* of the Enlightenment). It means openness, belongingness, willingness to include other people and to do things together. This value is yet another foundation of the welfare state. Communality is one of the most energising experiences of life—being part of a larger community that shares your interests. It means living together.

## 4. Encouragement

The realisation of communality is the precondition of encouragement. Encouragement refers to an enriching community whose members feel that they can achieve more than they ever could alone. In an impoverishing community, individuals feel that they are less than they could be. Encouragement means that you choose to enrich, not to impoverish, other people when you interact with them. Encouragement means that you spur people on, including yourself, to be the best they can and that you give them recognition for their achievements. Encouragement is actually a form of generosity. It can be crystallised as follows: “Not wanting to take anything away from other people; instead, working to make it possible for everyone to have more.” Other people should not be considered as threats that must be diminished; instead, they are opportunities that can make the world richer for us all. This is not a scarce resource in the world—there is plenty for everyone. The lack of communality and encouragement creates an atmosphere of envy.

## 5. Freedom

Freedom is also one of our traditional values (the *liberté* of the Enlightenment). It includes the rights of individuality: the freedom of expression, the protection of privacy, tolerance for differences. It means permissiveness. Freedom can be crystallised as follows: “Whatever adults do of their own free will is all right, provided that they do not hurt other people.”

## **6. Creativity**

Freedom creates space for creativity, the realisation of your potential. Creative passion is one of the most energising experiences of life. Creativity is related to the human need for self-fulfilment and continuous personal growth. It takes different forms in different people. Restrictions on freedom and creativity create an atmosphere of control.

## **7. Courage**

Courage is a value and characteristic that is required in order to realise the other values. In the European tradition, courage was considered to be one of the cardinal values as early as the classical period.

## **8. Visionariness**

Visionariness requires courage and, in the same way as courage, it is a forward-looking value. In the European tradition, it can be seen as the continuation of hope, a Christian value. Visionariness refers to insightfulness, the courage to dream, the willingness to make this world a better place.

## **9. Balance**

Balance is a type of meta-value: it refers to the balance between the other values. It means the sustainability of what we do. Since the classical period, this value also has been called temperance or moderation.

## **10. Meaningfulness**

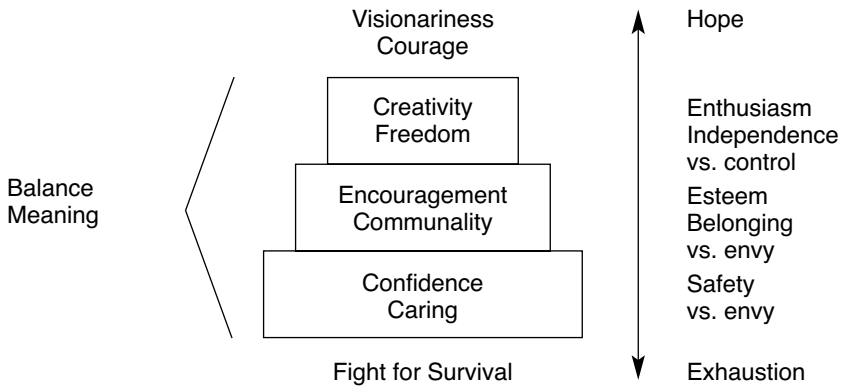
Meaningfulness is partly based on balance and the other values that have been described above, yet it is a value in its own right. In the end, we all want our lives to be meaningful. Thus, the meaningfulness of development depends on the extent to which development promotes intrinsic values, such as the classical values of wisdom, goodness and beauty. Meaningfulness can be crystallised in the following question: “Will this make my life more meaningful?”

Values can be considered to give life a meaning and make life worth living. Although the above-mentioned values build on the European

tradition, they are found also in other cultures (the European tradition is based on the multi-layered values of the Enlightenment, i.e. freedom, fraternity and equality; the Christian values of faith, hope and love; and the values of the classical period, i.e. justice, courage, temperance and wisdom—all values that can be found universally).

The importance of these ten values can be described with the following pyramid, which is often referred to in the description of man’s psychological needs (e.g. Maslow 1954, 1962).

**Figure 15.2 The pyramid of values from the psychological perspective**



The above description of needs emphasises caring and confidence as the basic human needs, which form the foundation for the social needs for communality and encouragement and the needs for freedom and creativity that are related to self-fulfilment. Courage and visionariness are forward-looking values, while balance and meaningfulness ensure that our actions have a meaning. Psychological experiences, which are listed on the right-hand side of the pyramid, show that you can either move up towards enthusiasm and hope or go down, through control and envy, towards fear and exhaustion. (This pyramid can be used for describing not only society as a whole, but also

its various sectors, such as economy, politics, work, education and individual people. However, the order in which the values are listed and the pyramid form of the figure should not be interpreted as a normative stand on the interrelation between the values.)

## Key Concepts of Social Development

In practice, if we are to meet global competition by implementing the above-mentioned development scenario and adopting the values described above, we must take into account the following key concepts related to social development:

1. A creative economy
2. A creative welfare society
3. Humanly meaningful development
4. A global culture

The latter part of this review describes the content of these concepts and the entailing value-based actions that must be taken in order to respond to global trends. The emphasis is largely European, although many of the issues apply much more largely.

### *1. A Creative Economy*

Under the pressures of international tax competition and the new global division of labour, developed countries can only rely on expertise and creativity, as routine jobs and routine production will not help them to compete with the cheap Asian markets. Developed countries must enhance productivity through innovations: creativity will make it possible to increase added value and improve the efficiency of production.

### **Spearheads of a creative economy: a stronger IT sector, culture and welfare**

Developed countries must actively look for new areas of economic activity where creativity can make a difference. Although developed countries should not be fixated on certain fields only, they will find new potential in culture and welfare, the major emerging sectors in the second phase of the information society. Therefore, the creative economy can be strengthened by examining the opportunities of the cultural sector (including music, television, film, computer games, literature, design and learning materials) and the welfare sector (innovations related to the reform of the welfare society, i.e. biotechnology and gerontechnology, which helps elderly people to live independently) so that they become new spearheads for the creative economy in addition to the IT sector. Interaction between IT, culture and welfare will also generate completely new opportunities. The key sectors of the creative economy are shown in Figure 15.3.

The two new spearhead sectors have vast potential. For example, the cultural sector generated a global business of USD 1.1 billion in 1999. This sum was distributed between the following fields (learning materials, which constitute an enormous business as such, are not included):

<b>Table 15.1 Cultural Sector Global Business</b>	<b>USD billion</b>
Publishing	506
TV & radio	195
Design	140
Toys and games	72
Music	70
Film	57
Architecture	40
Performing arts	40
Fashion	12
Art	9

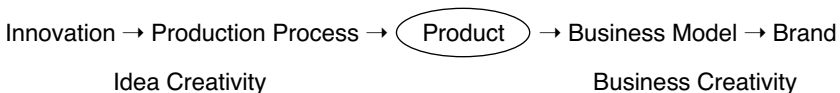
Source: Howkins 2001

The welfare sector, which includes health care, medicine, etc., is an even larger business which continues to grow, for example because of new biotechnological inventions and population ageing. Europe could leverage its expertise in this field, for example in public health care, by exporting it to other regions.

However, success in these areas in the global competition requires increased investment in national R&D activities (financing of creativity). The leading countries are soon investing almost 4.0% of their GNP in these areas, so government decisions along these lines are required if we are to succeed in the global competition in the near future. The most important question is how new public investments are directed: additional financing should be directed to the cultural and welfare sectors.

Financing must also be directed to the development of business models and marketing. Europe, for example, has clear problems at the end of the innovation chain, which is shown below (in practice, innovation does not progress in a linear fashion; the factors described in the figure form an interactive network):

**Figure 15.3 Innovation factors**



Europe is innovative in terms of products and production processes, i.e. idea creativity, but less creative in terms of business models and brand building, i.e. business creativity that helps to transform ideas into income. Therefore, financing is required in order to promote research and development (including training) related to business creativity.

Richard Florida has combined the creative economy with the concept of the creative class. According to him, this rising class consists of very diverse groups of people, such as researchers, engineers, writers, editors, musicians, film producers, media makers, artists, designers, architects, doctors, teachers, analysts, lawyers and managers. At the turn of the millennium, the creative class accounted for approximately one-third of the work force of advanced economies (Florida 2002).

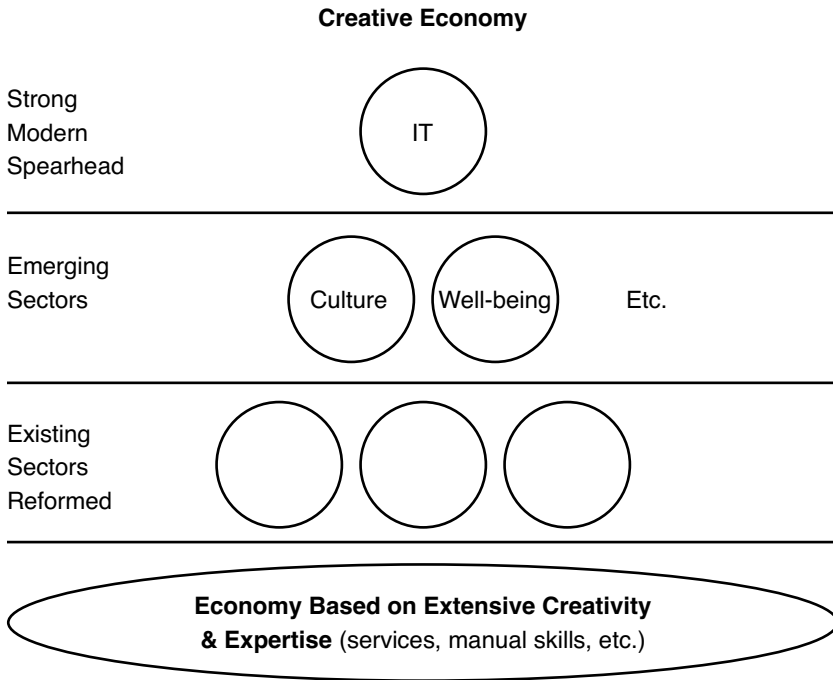
However, we should not confine the creative economy to a single class of creative professions only, as Florida does. Robert Reich has shown that interaction-based “personal-service” jobs constitute another extensive group of jobs in the information society in addition to the “symbolic analytical” jobs that are similar to those mentioned by Florida. Service professions indeed form an important factor of the economy. The creativity of interaction must, therefore, be seen as another important form of creativity, to which we must pay attention. Work based on interaction also increases productivity, improves the quality of work and provides significant opportunities for employment even for those with a lower education.

In fact, we must understand the creative economy as an idea that permeates all sectors of the economy. Sectors that have traditionally been strong remain significant, and even their productivity can be improved through innovations. Traditional manual skills also require creativity. The above-described spearhead sectors are part of an economy that is based on extensive creativity. The sectors of the creative economy are shown in Figure 15.4.

### **Encouraging conditions for working**

The success of the above-mentioned economy in the global competition depends on the degree to which taxation encourages this kind of activity. If we are to meet these challenges, our taxation system has to promote work that enhances the common good, i.e. taxation must promote job creation, entrepreneurship and creativity and thus make it possible to finance the welfare society.

**Figure 15.4 An economy based on extensive creativity and expertise**



It is essential to note that the welfare society is based on the *tax revenue generated by work*, not by the *tax rate*. Tax revenue can be generated only if the system encourages people to work. Although participation in unhealthy tax competition will not help maintain the welfare state, it must be pointed out that excessive tax rates can also undermine the welfare state.

The welfare society is based on the world's best expertise and work. The financing of the welfare state depends, first and foremost, on the achievement of a high employment rate and on society's ability to associate innovativeness with positive expectations by applying tax rates that encourage work. This will make it possible to finance the welfare society also in the future. A taxation system that encourages work also acts as an incentive for skilled employees to stay in their countries and makes it possible to attract skilled labour from abroad; this will in turn alleviate the problems caused to the welfare state by an ageing population.



## **Management and work culture in a creative society**

The government can, of course, only pave the way for creativity, as government decisions as such do not enhance creativity. However, it is important that the system encourages creativity, instead of restricting it.

The same applies to business. In an information society, companies must provide space for creativity through a management and work culture that promotes creativity (cf. Alahuhta and Himanen 2003, who describe this change, for example, from the perspective of Nokia's experience; Himanen 2001). The work culture and atmosphere are decisive factors in an economy where growth is increasingly based on innovations. The managers' main task is to promote creativity. An increasing number of companies are adopting a new key principle of management by setting ambitious goals that generate enthusiasm. Matters related to work culture will become an important competitive edge.

There is a distinct difference between the industrial society and the information society. In the industrial society, the bulk of the work consisted of routine tasks, and the result of work depended largely on the time that was devoted to it. The old work ethics, according to which work was an obligation that you just had to fulfil and suffering was thought to strengthen the character, made economic sense in the industrial era. In the information society, however, work depends increasingly on creativity. This means that the industrial work culture turns against itself also in economic terms: if people feel that work is nothing but a miserable duty and that the main point is to fulfil orders, they do not feel a creative passion towards their work, and yet this passion would make it possible for the company to continually improve its operations and stay ahead of the competition. The industrial era created a time-oriented management culture that was based on control, whereas the creative economy requires a result-oriented management culture that makes space for individual creativity.

This development is connected with the hierarchy of man's motives, which was presented above. Whatever we do, we are at our best when we are passionate about what we do. And passion evolves when we think that we are able to realise our unique creative talent. People who have such a passionate relationship with their job have access to the source of their inner power and feel that there is more to them than usual. People who feel that their work has a meaning do

not become tired of their work; work fills them with energy and gives them joy. We can see this phenomenon not only in business life, but also in any human activity (from learning to science and culture): people can achieve great results because they feel that they are able to fulfil their potential at work, and this meaningfulness makes them even more energetic and boosts their creativity. An encouraging atmosphere enhances well-being at work and job satisfaction.

In our changing economy, people work more and more in co-operation with others, so managers must be able to build enriching communities. Managers must set ambitious goals that generate *joint* enthusiasm, i.e. they must be able to generate interaction that enriches the working community instead of impoverishing it. Interactive skills will bring a key competitive edge.

This development can also be connected to the psychological pyramid of needs. The realisation of creative passion is a powerful experience, yet equally powerful is the feeling of being part of a community that shares your interests and appreciates what you do and who you are. History is full of examples of the power of this phenomenon. For example, in science and art, where money has never been the primary motivator, all great achievements have been made thanks to this power: belonging and being a recognised person. The same power applies to business at its best.

## ***2. A Creative Welfare Society***

As global competition becomes tougher and the population ages, the maintenance of the welfare state requires its reform. This reform can be referred to as the building of version 2.0 of the welfare state which guarantees the future of the welfare society.

The philosophy underlying the idea of the welfare state is that people have equal opportunities to realise their potential and are protected against the random misfortunes of life. This includes equal access to education, training and health care, etc. The ethics of this philosophy is that, in principle, everyone could have been born in any position in society and that any misfortune that someone has to suffer could have hit anyone. Ethically, the welfare state is based on the fragility of life and the ability to identify with other people's fates. It is based on the ability to imagine that things could just as well be the other way round: I could be in your position and you could be in

mine. This is what caring is all about. A fair society is fair regardless of the cards that fate has dealt you. In a fair society, your fate does not depend on the stars under which you were born, i.e. the economic and social status of your parents. A fair society provides everyone with equal opportunities in life, thus levelling out haphazard circumstances.

In short, the welfare state is based on caring, which is to be understood in the sense of fairness. To put it more precisely, fairness refers to equal opportunities, not a mechanically equal distribution of benefits. If individuals are provided with as equal opportunities as possible, it is only fair that their shares depend on their preparedness to work. Fairness like this encourages everyone to fulfil their potential.

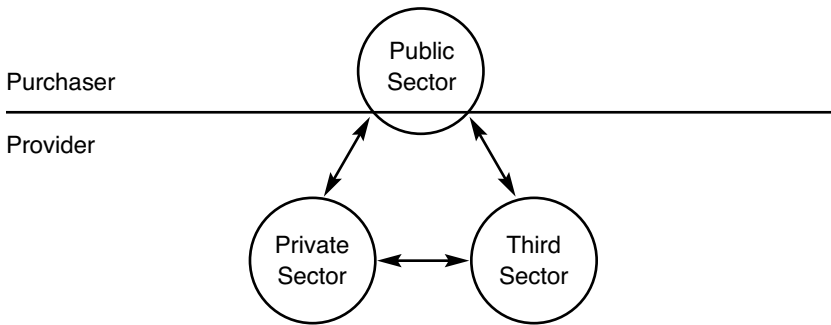
Regarding the concept of the welfare *state*, the government is responsible for providing the equal opportunities and protection. In a welfare state, this duty is allocated to the government, as the government represents the public interests. Although the government is, of course, not able to fulfil this obligation flawlessly, it is the best alternative because it is the only democratically controlled body that protects the interests of all of its citizens. The legitimacy of the government's right to levy taxes is largely based on its obligation to maintain the welfare state: we pay taxes to the government and expect it to provide us with equal opportunities and protect us.

*The purchaser-provider split in the organisation of welfare services*

However, we must make a specific distinction in relation to the concept of the welfare state. The above definition of the welfare state does not mean that all welfare services should be provided by the public sector. The government is responsible for organising (financing) the welfare services, but they can be provided either by the public sector, companies or non-governmental organisations. In some areas, the government should always also remain the provider. But in many areas, it is useful to separate the purchaser and the provider of the services from each other. In some cases, services can be provided best by parties other than the public sector. A more open competition and co-operation between alternative service providers is in the interests of citizens (as it guarantees that their taxes are used prudently). Therefore, it is better to use the term “welfare *society*” instead of “welfare state.” This is the first important step towards the creative welfare society: in many areas, the purchaser and the provider should be sys-

tematically split in the provision of welfare services. If the public sector's responsibility always extends from the ordering of services to their provision and evaluation, it will no longer be interested in developing the services. The reformed purchaser-provider model is shown in Figure 15.5:

**Figure 15.5 The purchaser-provider model**



*The future of the welfare society is in creativity*

The strong global trends, i.e. increasing competition and population ageing, increase welfare expenses, particularly in Europe, and thus increase the pressures for cutting these expenses. In fact, future welfare expenses cannot be covered even with moderate economic growth.

Fortunately, there is another alternative, as we can apply the core principle of the information society to the welfare state: the maintenance of the welfare state by improving its productivity through innovations. This does not mean that productivity would be enhanced by putting more pressure on the employees and by increasing haste at work—in fact, this would even be impossible, as people are already overloaded. Instead, it means that productivity is enhanced through innovativeness, i.e. by combining technological and process innovations (networked organisations). It must be noted that this does not mean the provision of services over the Internet only (although access to services over the Internet is generally a good idea); it means that the processes with which the services are provided are reformed with the help of new technology and new process models.

In practice, the improvement of productivity through innovations requires that the public sector must adopt a similar management and work culture based on creativity to that described above. People should associate creativity with positive expectations. Currently, the system does not encourage improvements, and innovations are curbed. If an individual or a unit does something in an innovative manner and improves productivity, the unit's budget is cut and the individual's work load is further increased. The employees and the employer must agree on a new system, where most of the savings achieved through improved operations will remain in the unit and can be spent for the future development of the unit. In addition, the employer must guarantee that individual employees will personally benefit considerably from the time savings achieved through their innovations. The opportunity to follow a more humane working rhythm and to be able to balance work and family life in a more satisfactory manner is a motivating prize in our increasingly stressful times. The realisation of this kind of work culture requires an agreement between employer and the employee organisations which guarantees the protection of jobs if and when operations become more efficient (if increased productivity jeopardises jobs, any positive expectations related to innovations will fade). Managers must be prepared to act as examples and lead the way. We could introduce a specific training programme for welfare society management and invite the most successful managers of businesses and the managers of best practices in the public sector to share their views and experiences.

As people are prone to consider all changes in the information society to be technical, it must be emphasised once more that, according to research, productivity improves most when technological and process/organisational innovations are combined. This does not mean simply the automation of current operations although, for example, the introduction of electronic prescriptions in health care considerably improves productivity. Instead, entire processes and organisational models must be assessed in order to identify ways of providing the services to patients more efficiently in both economic and qualitative terms. Experiences obtained from business life have shown that the most successful innovations are made when the users of the services or products in question are able to participate in the innovation process. Of course, information networks (such as the Internet) provide efficient new opportunities for participation.

*The basis: an inclusive, high-quality education system*

The success of the information society and the provision of equal opportunities in the welfare society are, eventually, based on an inclusive and high-quality education and training system. In the information society, where learning continues throughout our lives, schools should not only distribute information but also, and equally importantly, build self-confidence and social skills, as well as help pupils to fulfil themselves by identifying their talents and creative passions. In addition, the challenge of lifelong learning in the information society requires that people must learn to learn—become able to identify problems, generate ideas, apply source criticism, solve problems and work together with other people. Teacher training should pay more attention to these matters.

The success of education in the achievement of these goals is also the foundation of the economy: especially for the small countries, their success depends completely on their ability to leverage the potential of their population to the full. For this to happen, the education and training system must be of a high quality throughout the country, so that the children's opportunities to learn do not depend on the region in which they live or the particular school that they attend.

In the information society, information is used as “raw material,” so an open information infrastructure becomes an important factor. Free access to information should be promoted by all possible means: Information generated with public funds should be provided to citizens free of charge whenever possible. This applies to other publicly generated information, such as the historical material of museums. The accessibility of information and knowledge helps people to develop their information-processing skills, while it can also be used as the basis for new information and new innovations.

Innovation is ultimately based on the higher education system. If a country is to succeed in the global competition, it is important that its universities and other higher educational establishments receive adequate financing. It is increasingly important to join forces in the financing of science to be able to rise to the top in international research in the areas specified by the government. The educational units that operate in these areas must be sufficiently large and have adequate international contacts. Small countries, in particular, must carefully choose

the areas in which they want to specialise, because they can carry out leading-edge research and business in a limited number of areas only.

### ***3. Humanly Meaningful Development***

The human sustainability of the rapid global development has become an increasingly crucial question in the information society. The development of the information society can currently be characterised by the spread of a “culture of emergency” from the economy to workplaces and from the public sector to people’s lives. The information society can also be called the risk society: volatility has increased in the financial market, employment relationships have become increasingly unstable, the public sector does little but reacts to crises, and individual citizens are in a constant hurry. The importance of the protection provided by the welfare society is emphasised in the information society, where all kinds of risk are increasing.

However, if we are to maintain the welfare society, we need new ways of promoting a socially, mentally, physically and culturally balanced development. For example, the current attempts to keep employees at work to an older age are not realistic because few people currently are willing or able to work up to the present official retirement age, let alone longer than that. If a more sustainable development model is not adopted, other actions will prove useless, and vice versa: a more sustainable development model has a significant effect on our ability to finance the welfare society also in the future (morbidity and premature deaths cost enormously through lost work). The best national health programme is the prevention of illnesses and other health problems, i.e. the promotion of health. The following sections focus on the promotion of health in more detail.

#### *Social balance*

A new creative work culture was described above. This culture is at best characterised by the energising experiences of self-fulfilment and belonging to an enriching community. Research has shown that good management and a good work culture are important factors that prevent exhaustion. People who are satisfied with their jobs feel well at work, which is positively reflected in their overall lives. Therefore, we can best increase the sustainability of development by paying more attention to employees’ job satisfaction and well-being at work.

However, this alone is not sufficient; we also need a better balance between work and leisure, as the creative culture cannot be sustainable in the long term if work and other aspects of life are not balanced. In addition, adequate free time allows people to regenerate their energy and creativity and have a satisfactory social life. However, current trends are going in the opposite direction: an increasing number of people work longer and longer days, work is becoming increasingly stressful and people have less and less time for their family and friends. This is reflected, for example, in children's mental problems that are becoming increasingly common because parents have less time to spend with their family; another consequence is the rising number of broken marriages.

People who work in a continuous state of emergency become exhausted, so they have no energy for active free time. In many countries, one-fifth of workers currently suffer from exhaustion.

A balanced development requires both a reform of the work culture and concrete ways for balancing work and leisure in a more satisfactory manner. We must introduce the principle of reasonableness in our work culture: our era is characterised by increasing requirements, so employees get the impression that their contribution is never quite adequate. Therefore, the principles of management, which were described above, must be complemented with an important addition: managers must set goals that are adequately ambitious so that their achievement generates the feeling of success. However, the goals must be reasonable, so that people are sufficiently often able to succeed and can be satisfied with their achievements. Studies of burnout have shown that people become exhausted if they never feel that they have done well.

As regards concrete action, we need models that balance work and family life better. Of course, the implementation of flexible working-time arrangements depends on the nature of the work in question and must always be planned in co-operation between the employer and the employees. However, employers and employees could conclude an *agreement on more flexible working hours*, which would cover a number of alternatives to meet the needs of individual employees. Examples of such arrangements are:

- Project work, i.e. the specification of work in terms of its results and schedule, so the employee in question is free to



decide where and how (in the office, at home, etc.) he/she will work in order to best achieve the agreed results by the agreed time limit.

- A working-time bank, i.e. an opportunity to save worked hours “in a bank” and to use the saved time when necessary by taking days off or by working shorter days (for example, in cases where child care requires). This model can also be developed further, so that employees can cut their working time and have their pay reduced accordingly.

What is important in both these arrangements is that employees can take time off when they need it, not just when it fits their work schedules. Of course, in the name of reciprocity, employees must be prepared to adjust their working hours when the employer requires (this makes it possible to react to fluctuations in demand by cutting working times temporarily and to avoid redundancies). However, not only do these arrangements allow employees to have more free time; they also help to increase job satisfaction, as research has shown that job satisfaction depends largely on the extent to which employees can affect their work. The practical effects of the labour agreement will, of course, depend on the managers’ and employees’ attitudes towards the new arrangement.

### *Mental balance*

As was noted above, people in many countries retire many years before the official retirement age. Mental health problems have become one of the most important reasons for early retirement. Development has become mentally unbearable for many people.

Continuous stress, which expresses itself as various symptoms such as sleep disorders, is an extremely common mental health problem in the emergency culture. Stress has a relationship with many illnesses, such as heart and stomach diseases. The illnesses and diseases caused by excessive stress incur huge costs to society, to say nothing of the human sufferings that they cause. The above solutions are largely applicable also to this problem.

However, more serious mental health problems, such as the widespread depression and anxiety problems, require that the health care system pays equal attention to psychical and physical health.

*Physical balance*

In an information society, physical activities are replaced by virtual ones (Internet, TV, computer games etc.). Some people naturally go on with their physical activities, while for other people, physical activity ranks low. We must, of course, respect people's right to choose their lifestyles.

On the international and national levels, however, it seems that in the information society we suffer not so much from information bloat as just physical bloat (this does not mean that information bloat should be underestimated, as it is also a big problem)! Globally, one-fifth of people of working age are overweight. Obesity (and the related eating habits) are known to correlate significantly with cardiovascular diseases.

We also spend an increasing part of our lives in physically bad positions, gorging ourselves on information. Although information work is physically not as strenuous as traditional industrial work, it stresses in another way, through static working positions. (increased teleworking from home has made it necessary to pay attention to work ergonomics also at home, not just in the workplace). The situation is further aggravated by people's increasing habit of spending their free time in the static virtual world (computer, TV, virtual games, etc.).

In the information society, we now need actions that will help improve our physical health and well-being but which are not patronising and respect people's right to choose their lifestyles. Such an approach could be an international exercise campaign, which would inspire people to identify and adopt forms of physical exercise that suit their needs and give them pleasure. The most important point is, of course, that families would help children to identify their favourite forms of exercise and that schools would provide pupils with positive experiences of exercise and thus boost their willingness to pursue physical activities also in their free time. However, the campaign must be extended to workplaces if it is to reach the adult population. The campaign could be implemented in workplaces, for example, so that employees are allowed to exercise during the workday (as part of flexible working-time arrangements).

Other approaches must also be applied. Successful sports heroes could advocate their sports through TV, while less traditional forms of physical exercise should also be highlighted. Here are some examples of sports:

- sports (from running and swimming to tennis and football)
- yoga, Method Putkisto, etc.
- gym, aerobics
- lifestyle physical activity (walking to and from work, using the stairs instead of taking the lift, etc.)
- dancing
- going for a walk with friends
- outdoor activities
- cultural tours

Having more exercise would have a considerable positive effect not only on the health of those who exercise, but also on society's welfare expenses as a whole. This development could be promoted by providing people with economic incentives to exercise, for example by giving them the right to use public sports facilities (e.g. swimming halls) free of charge on certain conditions. People could also receive a tax allowance on certain sports expenses. This is the "exercise always pays back" principle, as the investments made in exercise today can save considerable amounts of money in the future. The facilities provided by the information society, for example the Internet, can be used for the preparation of easy-to-use weight-loss and exercise programmes and for the centralised booking of sports services.

In the end, this kind of a balanced culture of creativity would improve the quality of people's lives (through increased job satisfaction and a better balance between work and other aspects of life) and would thus enhance the productivity of work (as companies would be better able to adjust to fluctuations in demand and employees would be more energetic and would achieve better results at work) and guarantee the maintenance of the welfare society.

### *Cultural balance*

Finally, it should be specifically noted that the cultural balance of development also requires self-fulfilment outside work. Underlying this entire review is, indeed, the idea of an active approach to life that is realised not only in the private sector (entrepreneurship) but also in the public sector (innovativeness) and non-governmental organisations (caring, art, hobbies etc.).

Culture and well-being should be understood as intrinsic values, not just as economic tools. This means that we must promote also those forms of culture that are commercially unprofitable. In fact, commerce should be seen as a tool that must only be used to the extent to which it benefits life, i.e. the realisation of intrinsic values.

#### ***4. A Global Culture***

In global development, we must progress towards joint development that is sustainable on a world scale. This requires greater open-mindedness from all nationalities.

The maintenance of our creative culture also requires such a more open-minded culture. In this way, ethical and economic justifications point in the same direction. We must consider the necessary development to be primarily an opportunity for all.

##### *From a doorman's approach to a welcoming culture*

As has been described above, the population of many countries is ageing so rapidly that, already in 2010, their populations start to shrink, unless there is openness to migration.

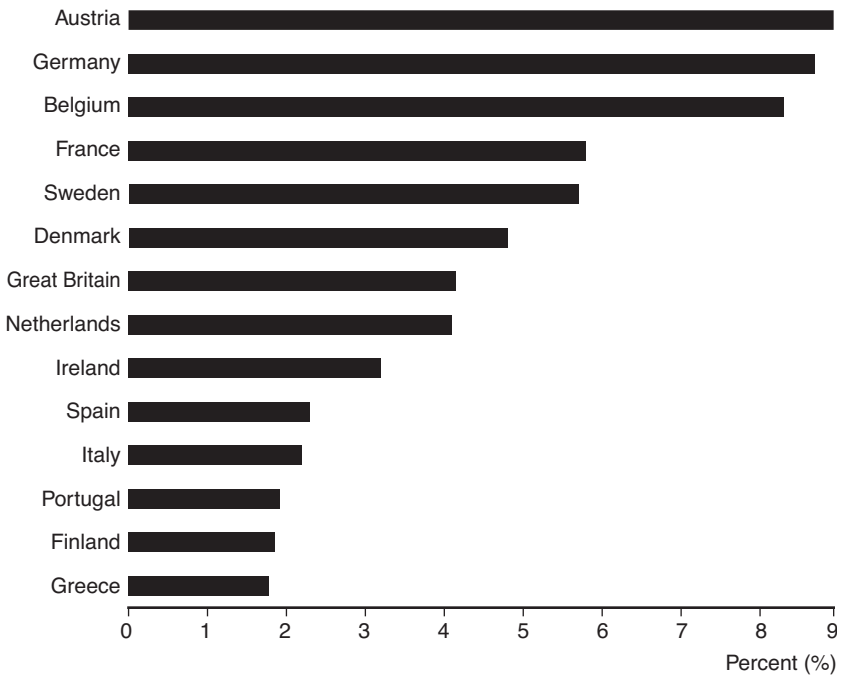
Immigration is also the only way of improving the dependency ratio, i.e. the ratio of employed people to the dependents (e.g. pensioners). Companies will also need foreign employees when the domestic supply of labour decreases.

In practice, if we are to respond to these challenges, we need political courage to increase the number of immigrants significantly (including high-paid and low-paid employees).

We must become more open-minded if we are to meet the requirements of globalisation. Tolerance must become a value for us Finns and we must show it in our everyday life.

In an ever-globalising world, we cannot keep our borders closed to the rest of the world, neither for ethical nor for practical reasons. We must get away from our previous attitude, the doorman's approach. We cannot act as a stern doorman who divides people into two groups: "You are welcome, you are not."

**Figure 15.6 The proportion of the foreign population in different countries in 2000 (%)**



Source: Münz (2003)

### *The internationalisation of higher education*

One of the best ways for integrating immigrants to society is to be open to foreign students. Students have plenty of opportunities to establish personal contacts during their studies and they often learn the Finnish language easier than other people. Both these matters help to gain a feeling of belonging to the new culture. It would be reasonable to grant foreign students automatically the right to work after graduation. Bureaucracy should be minimised.

However, internationalisation must be seen as a two-way road. We can benefit from global expertise also by encouraging students to include exchange periods in their studies.

The same applies to university researchers. Universities must make serious efforts to recruit researchers globally. Ideally, top international researchers should account for a considerable number of our university professors.

However, just as in the case of students, this is also a two-way process. Science can be globalised also through the international activities of researchers. Therefore, it would be very profitable to grant more financing for research that is carried out overseas, for participation in international conferences, etc., as this is a cost-effective means for obtaining leading-edge international expertise. The international co-operation networks that are established in this way will further help to attract more renowned foreign researchers to the country.

Immigration, studies and research periods carried out abroad and international networks must be considered to be mutually complementing strategies that are all needed.

### *Attracting skilled labour*

Global companies need skilled team leaders and researchers who have international experience. The need for experts exceeds the national supply, so two alternatives remain: companies can either relocate their units overseas or recruit skilled labour from other countries.

Another challenge for these companies is keeping their current experts in their country. Under certain conditions, companies can benefit from the experiences of employees who go abroad to work if and when they return. However, if the number of experts leaving a country exceeds the number of experts coming to the country, the development is unsustainable.

Reasonable income taxation, which was discussed above in the section on the creative economy, is an important key factor that would help to prevent the outflow of experts from the country and attract experts from abroad. Taxation must promote creative work.

However, Richard Florida's research has shown that the attractiveness of a region to experts requires also a more extensive, open-minded culture of creativity. Experts are attracted by multi-cultural environments that are renowned for their openness to diverse ideas and different people, i.e. for their creative drive (Florida 2002). To give an example, one-third of the engineers who work in Silicon Valley, or in the San Francisco Bay Area, are nowadays from India or China, and the total number of engineers who come from overseas is approximately 40% of all the engineers in this area. (Saxenian 1999).

People in the San Francisco Bay Area have adopted an open-minded approach to creativity in terms of both technology and different lifestyles (e.g. this area was the home of the hippie movement, the gay movement and various oriental philosophies in the West). Florida points out that the competition for creative experts is increasingly based on the cultural variety and open-mindedness of the region: this includes vibrant restaurants, a bustling street culture, music clubs, small galleries, new theatre and dance groups and multi-faceted exercise and other leisure opportunities provided by the local authorities. The most important thing is that the region is characterised by the general value of freedom, which extends from the freedom of expression to a vibrant restaurant culture and sexual permissiveness.

### *Global reciprocity*

This review is based on the principle that globalisation must be reciprocal. Therefore, the objective of the proposals made in this review, such as the need to increase immigration, is not just to protect interests of individual countries. Underlying the proposals is a more extensive ideology: caring and sustainable development.

It has been calculated that the opportunity for the citizens of developing countries to obtain work permits, whether for a short or a longer term, and irrespective of the type of work for which they are granted, would be one of the most important ways to improve the situation of developing countries. It would increase their annual income by USD 200 billion, i.e. four times the current development aid. This would be structurally very important, because it would transfer not only money but also expertise and business from developed to developing countries. AnnaLee Saxenian has shown that the brain drain between Silicon Valley and Asia has been replaced by “brain circulation”: the Chinese and Indian experts who worked in Silicon Valley are returning to their home countries, where they are setting up businesses and establishing networks between other domestic companies and the best experts of the field (Saxenian 2004). It is unethical to require that capital and goods must be allowed to move freely while employees are denied this freedom. The rights of capital must be complemented with the rights of people. The current situation is awkward, as if we said to goods: “Freedom is your fundamental right. You were born free!” and then told people: “But not you.”

In regard to the new global division of labour, we should remember that the partial transfer of routine work to poor countries makes it possible for them to rise from poverty. We must not object to this transfer in principle. We must indeed consider globalisation to be a reciprocal process from which we can benefit but for which we must give something in turn.

Another critical factor that would improve the position of developing countries is free trade, which should be fair in both directions. This could be called a *quid pro quo* agreement: for example, it would benefit the growth of the IT sector both in developed and developing countries, if the developing countries would open up their markets more. However, this requires reciprocity on a *quid pro quo* basis: it is immoral to require that developing countries must deregulate their trade while developed countries protect their markets from the main products supplied by developing countries. This situation can be compared to a relationship where someone suggests a “free sexual relationship” to their partner and adds: “It means that I am allowed to have sex with anyone I want, but you are not!” Developed countries prevent free trade in agricultural and textile products, which account for two-thirds of the exports of the developing countries. It has been calculated that fair trade in agriculture would bring USD 120 billion to the developing countries, i.e. more than twice the entire development aid that they currently receive. This would be an extremely important change for the better, because it would make it possible for the developing countries to improve their situation through their own economic operations. Therefore, it is critical that the government subsidies to agriculture in developed countries are abolished (in a manner that justifies the change also for farmers and other agricultural workers). This would remove a key structural factor that keeps the developing countries in the underdog’s position in the global economy. *Quid pro quo*.

The minimum that we should do—albeit it is extremely important in symbolic terms—is to stick to the commitments that the rich countries have made relating to development aid. Rich countries have committed themselves to the United Nations’ goal, according to which the development aid provided by developed countries should be at least 0.7% of their GNP. Currently the average figure for all developed countries is only 0.23%. If developed countries stuck to their prom-



ises, the developing countries would receive almost twice the current aid, which is USD 50 billion. Our current situation is shameful. The rich countries must stick to their commitment and must use their development aid also to promote a freer transfer of information (including the open source technology). Development aid can be compared with a modest request: “Could you consider using 0.7% of your time caring for other people?”

The combination of social justice and the information society has an important role to play in the development of a more sustainable form of globalisation. This review’s model of combining a dynamic information society with the creative welfare state is meant to provide some raw material for that critical attempt.

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