

## **Scenario Planning**

The future of the Lowlands in 2025

Research of Driving Forces

Combined effort by Group 1 (MB, CP, MT, PP)

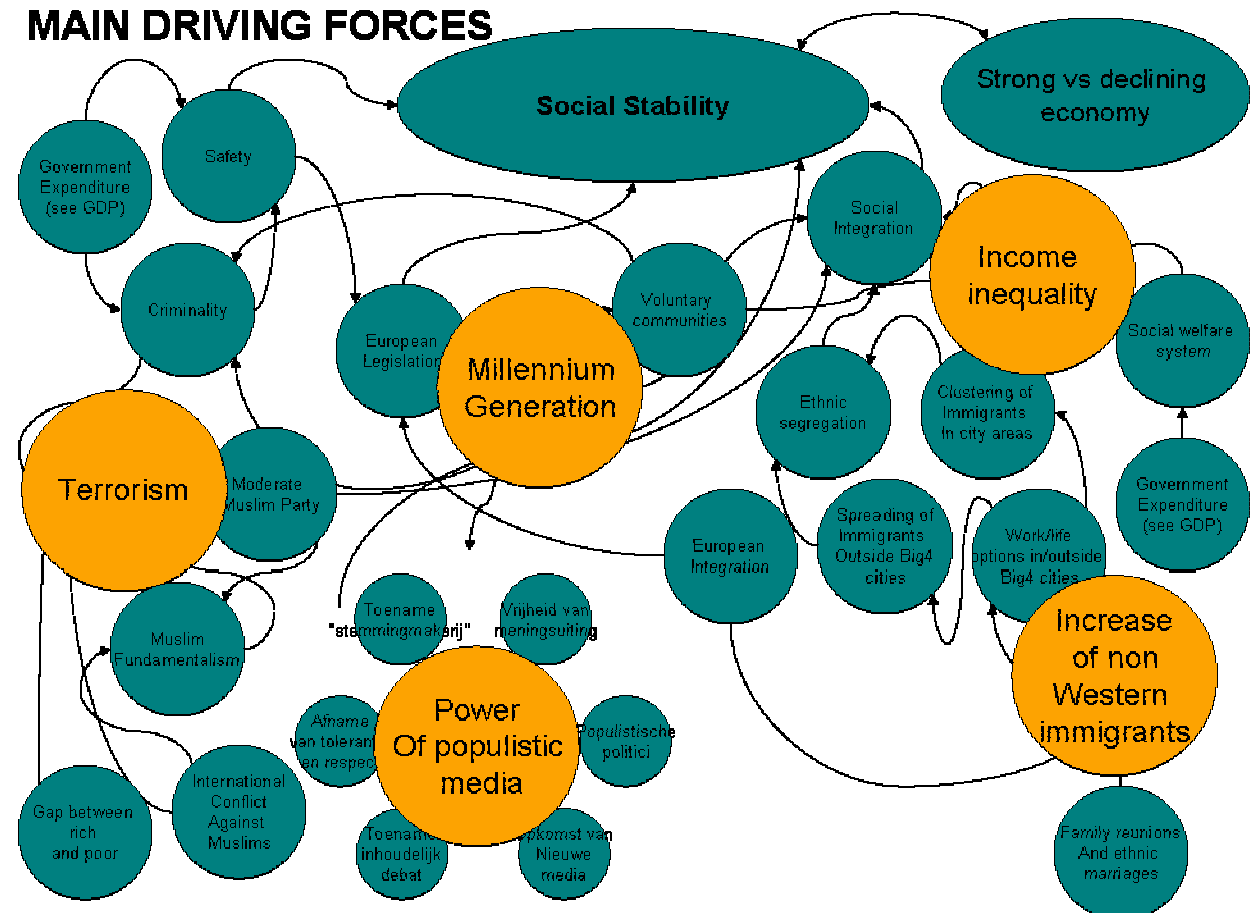
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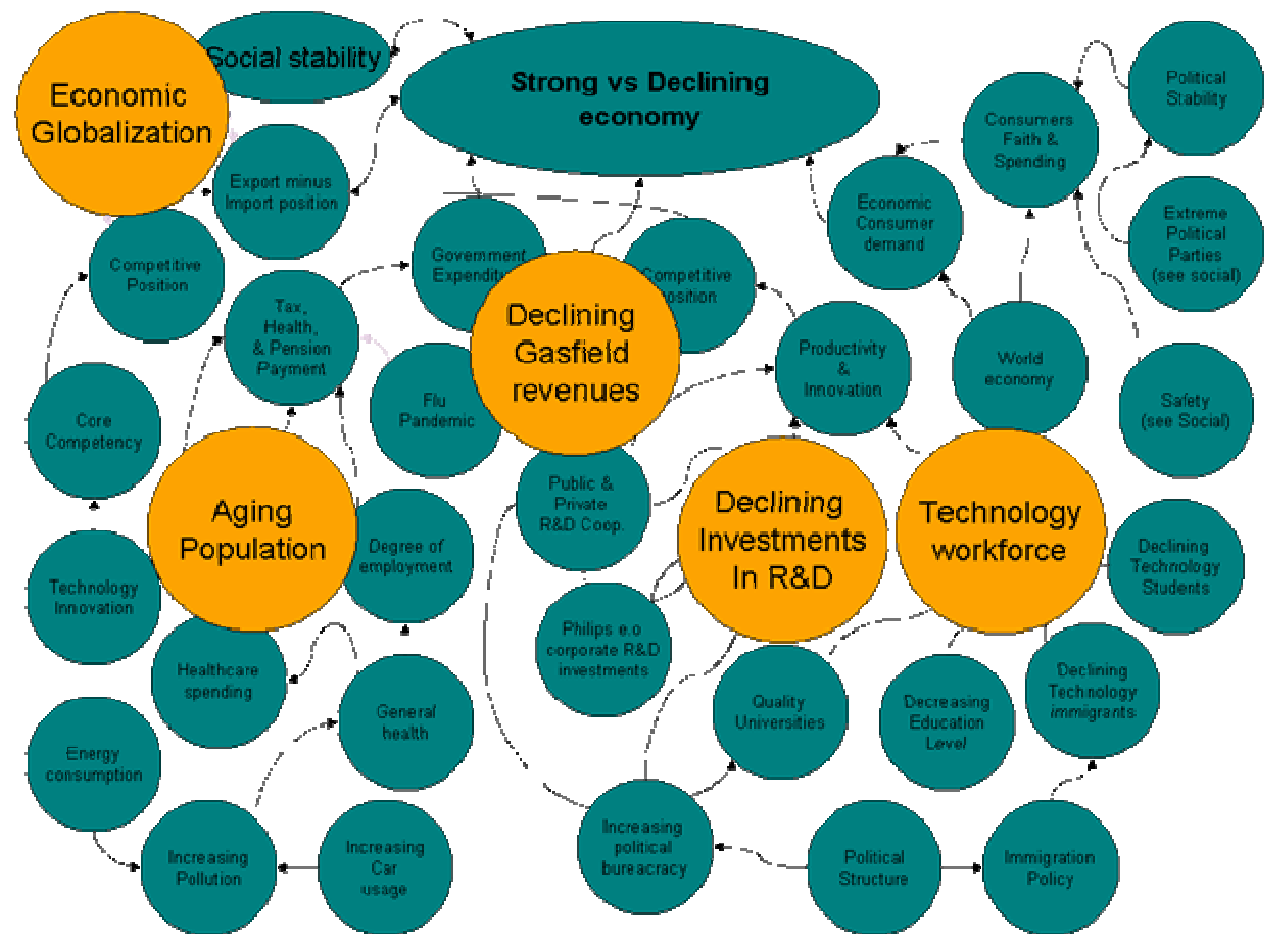
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## 1 Major forces influencing Social Stability and Strong vs declining economy

The diagram has been split in two segments to enable proper printing & handling.  
Obviously, these two diagrams are interconnected.

### MAIN DRIVING FORCES





## 2 Pollution (MB)

1. Pollution is a growing problem. Since the industrial revolution, carbon dioxide concentration have increased nearly 30%, methane concentrations have more than doubles, and nitrous oxide have risen by about 15%<sup>1</sup>. Research till today don't agree what the affects are on the world's climate. But one of the major assumptions is that the global warming is a result of this increase in greenhouse gasses. One major result of global warming is the increase of the sea level. Another one is the increasing number and increasing power of hurricanes and floods.
2. According to research, the carbon emission per capita in Europe and the US did not grow between 1970 and 1995<sup>2</sup>. However the carbon emission in Asia (especially India and China) is growing rapidly. This is even more worrying when you think that economic growth is especially predicted for this region.
3. Kyoto agreement has been agreed on to stop the growth of the emission of greenhouse gasses. However one of the major problems is that America never signed the Kyoto agreement. Furthermore it is the question if the agreement is good enough to 'save the earth'.
4. Increasing pollution within the Lowlands can have a major impact on the general health of the population.  
([http://healthandenergy.com/air\\_pollution\\_health\\_effects.htm](http://healthandenergy.com/air_pollution_health_effects.htm))

### Conclusion:

- **The most important threat of the increasing pollution in the Lowlands is the threat on the general health of the population.**

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<sup>1</sup> Four Futures of Europe, Ruud de Mooij & Paul Tang, Centraal Planbureau, page 66

<sup>2</sup> Four Futures of Europe, Ruud de Mooij & Paul Tang, Centraal Planbureau, page 67

### **3 Sea Level (MB)**

1. The Sea Level around the Lowlands is likely to go up in the coming years due to global warming. The expectations are that the sea level will rise between 20 and 100 centimetres over the next 100 years. If this is linear we can assume that the sea level will go up between 4 and 20 centimetres in the coming 20 years. The assumption is that this increase in sea level is not threatening within the coming 20 years. (<http://www.noorderbreedte.nl/artikel/00-5-10.htm>)

**Conclusion: The rising sea level is not an important driving force for the Lowlands from now till 2025 (except that some investments need to be made to maintain the current protection against the sea).**

## 4 Global Warming (MB)

1. In the past century the earth temperature has increase by approximately 0.45 degrees Celsius in the past century  
(<http://www.globalwarming.org/article.php?uid=65>). The expectation is that the temperature will rise further in the coming century, however these predictions are difficult because the effects of clouds, sun-shine etc. are very complex. And therefore the predictions are rather difficult. IPCC predicts a increase of between 1.4 and 5.8 degrees Celsius for the next century  
(<http://yosemite.epa.gov/oar/globalwarming.nsf/content/climateuncertainties.html> ).
2. One of the major results of global warming is an increase in natural disasters (floods, tornados). Also the intensity of these natural disasters is likely to increase. However these natural disasters are very rare in the Lowlands.
3. For the Lowlands one of the major effects is a possible change in climate, a little warmer (which I don't think is a problem ;- ) ) but it is also expected to rain more. (And if the winters are really getting warmer... the 'Elfstedentocht' of 1986 is likely to have been the last in the Netherlands, this might impact the Dutch identity...)

**Conclusion: The immediate affect of Global Warming on the Lowlands is expected to be relative low.**

## **5 Natural Disasters (MB)**

1. Natural disasters are probably going to be more frequent and more extreme with the result of global warming. However natural disasters like tornados and floods are very rare in the Lowlands.

**Conclusion: The expectation is that the increase of natural disasters is not a major driving force of the Lowlands within the coming 20 years.**



## **6 International Environmental Legislation (MB)**

1. It is very likely that the environmental legislation Europe will highly depend on the European integration. When the European integration will get stronger, the European environmental legislation is expected to increase. Without a strong EU integration this EU legislation is expected to stay at a similar level or even go down.
2. The level of global legislation will highly depend on the globalization.
3. The degree of International Environmental Legislation will be linked to the feeling of urgency of the international environment. In case the number of natural disasters highly increase and there is more evidence found that this is related to pollution, this will increase the sense of urgency to arrange environmental legislation on a global level.

**Conclusion: EU integration and the level of globalization are expected to more important driving forces than the International Environmental Legislation.**

## 7 Technology and Innovation (CP)

*"So it reasonable to say not only that innovation has contributed to the growth process, but without it the process would have been reduced to insignificance"*

Baumol 2002

The information below is an abstract taken from several websites:

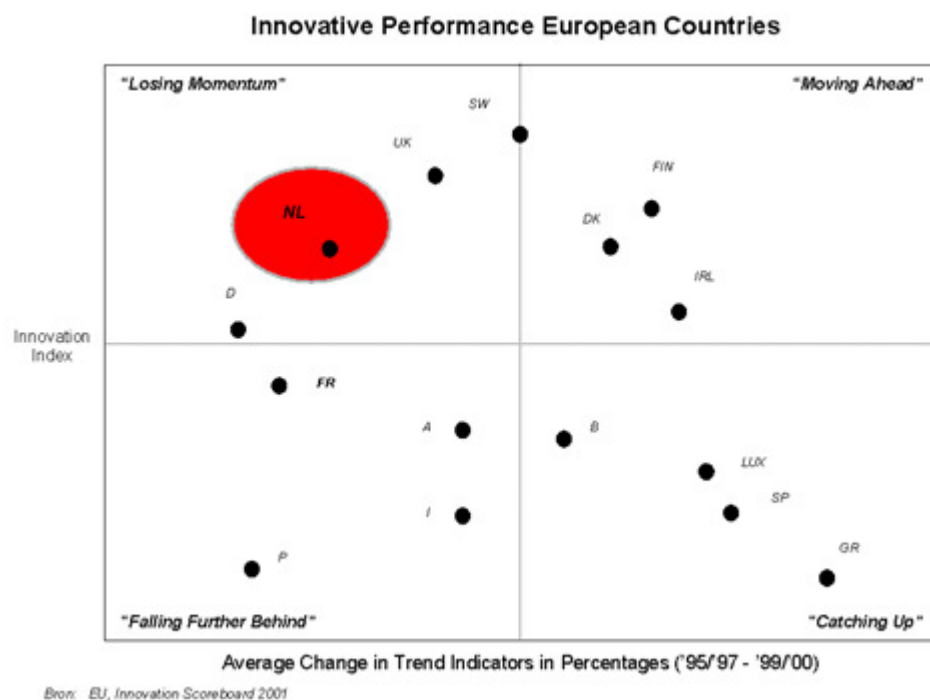
[www.onderzoekinformatie.nl](http://www.onderzoekinformatie.nl),

[www.nieuws.leidenuniv.nl/content\\_docs/innovatiebeleidsplan.pdf](http://www.nieuws.leidenuniv.nl/content_docs/innovatiebeleidsplan.pdf), [www.oecd.com](http://www.oecd.com).

**Conclusions taken from these websites are highlighted at the end of this section.**

1. In Nederland wordt de laatste jaren veel gesproken over innovatie. Nederland moet een kenniseconomie worden. In 2010 zou Nederland één van de meest dynamische en concurrerende kenniseconomieën binnen Europa moeten zijn, met uitgaven van 3% van het BNP aan R&D. Ongeveer 2% daarvan zou door het bedrijfsleven moet worden geïnvesteerd (Lissabon-doelstelling).
  - Het innovatieplatform richt zich op het versterken van de innovatiekracht van Nederland. Het doel is de Lissabon-ambitie (2000) van de Europese Unie waar te maken om binnen tien jaar de meest concurrerende en dynamische kenniseconomie in de wereld te worden. Nederland moet bovendien in 2010 weer tot de koplopers in de Europese kenniseconomie gaan behoren
    - Speerpunten binnen het Nederlandse Wetenschapsbeleid zijn hierbij vastgesteld rondom ICT, genomics en nanotechnologie (OC&W, Wetenschaps en Technologie indicatoren 2003)
  - Uitgaven van het bedrijfsleven lopen echter achter. De wisselwerking tussen kennisinstellingen en het bedrijfsleven en maatschappelijke instellingen wordt vaak niet optimaal bevonden, maar hierover verschillen de meningen (AWT 2004). Het Nederlandse innovatiesysteem wordt door de OECD als complex omschreven, met een groot aantal spelers en een variëteit aan instituties (EZ 2004).

3. Nederland kampt hierdoor met een verslechterende internationale concurrentiepositie en de economische groei blijft achter bij de rest van Europa. Terwijl de ambitie is om tot de kopgroep van Europese kenniseconomieën te behoren.
- Het algemene oordeel over het innovatievermogen van Nederland is gematigd positief. Er is een goede basis aan publieke kennis en kennisontwikkeling waarop kan worden gebouwd: er is potentie om werk te maken van innovatie.
  - De huidige cijfers en trends tonen echter een matig beeld dat verder aan het verslechteren is. Bijna alle innovatie-indicatoren laten een duidelijke negatieve trend zien. Nederland blijkt de goede kennisbasis onvoldoende te benutten om nieuwe producten en processen te ontwikkelen. Nederland verliest "momentum" op het terrein van innovatie, en dreigt zelfs weg te vallen.



- Deze ontwikkelingen doen zich voor ondanks overheidsinvesteringen in diverse technology-initiatieven zoals:

- i. [WBSO-regeling](#)  
Kleine en middelgrote bedrijven die investeren in technologische vernieuwingen, kunnen belastingvoordeel krijgen via de Wet bevordering speur- en ontwikkelingswerk (WBSO)
- ii. [TechnoPartner](#) (EZ en OCW)  
TechnoPartner stimuleert en helpt mensen die een onderneming willen starten op basis van een technische vinding. Deze website biedt informatie voor technostarters, investeerders, kennisinstellingen.
- iii. Het [Innovatieplatform](#) (tijdelijke werkgroep)  
Het innovatieplatform richt zich op het versterken van de innovatiekracht van Nederland.
- iv. [Ministerie van Economische Zaken](#)  
Het ministerie van Economische Zaken richt onder andere op technologiebeleid en innovatie
- v. [Forum voor Techniek en Wetenschap \(NFTW\)](#)  
Het Forum voor Techniek en Wetenschap is een onafhankelijke vereniging met leden uit het bedrijfsleven, universiteiten en onderzoekinstellingen. Het Forum is een ontmoetingspunt van de in Nederland aanwezige kennis en expertise op het gebied van technisch-wetenschappelijk onderzoek en onderwijs, technologie-ontwikkeling en technologische innovatie.
- vi. [Senter/Novem](#)  
Senter en Novem, twee agentschappen van het Ministerie van Economische Zaken, zijn gefuseerd. De nieuwe organisatie bundelt kennis van innovatie, energie, klimaat, milieu en leefomgeving. Websites: [Senter](#) [Novem](#)
- vii. [Stichting Innovatie Alliantie \(SIA\)](#)  
Stichting Innovatie Alliantie heeft tot doel het bevorderen van samenwerkingsrelaties tussen MKB-bedrijven en

kennisinstellingen ([positionpaper](#)). De SIA is een initiatief van MKB-Nederland, HBO-Raad, TNO, Telematica Instituut, Syntens en VNO-NCW. Via het SIA wordt zes miljoen beschikbaar gesteld voor innovatieve toepassingen in het MKB (zie ook [Persbericht - 29 september 2004](#)).

viii. [Syntens](#)

Syntens, Innovatienetwerk voor ondernemers. Syntens stimuleert en begeleidt ondernemers in het midden- en kleinbedrijf via tal van projecten bij innovatie.

ix. [www.kennistelefoon.nl](http://www.kennistelefoon.nl)

De Kennistelefoon is een initiatief van Technet. De Kennistelefoon is opgericht in samenwerking met onder meer TU Delft, TNO, IHE, Nederlands Normalisatie Instituut, het Waterloopkundig Laboratorium en ruim tachtig innovatieve hightech bedrijven om innovatie in Nederland een impuls te geven. De Kennistelefoon is een non-profit organisatie.

x. [Ministerie van Economische Zaken](#)

Het ministerie van Economische Zaken richt onder andere op technologiebeleid en innovatie.

xi. Het [Innovatieplatform](#) (tijdelijke werkgroep)

Het innovatieplatform richt zich op het versterken van de innovatiekracht van Nederland.

2. Als deze trend voortzet, wordt het erg moeilijk de gestelde ambities te behalen. Met name de achterblijvende instroom en beperkte mobiliteit van *Wetenschap & Techniek gediplomeerden*, de *lagere private R&D -intensiteit* en de relatief beperkte *publiek-private wisselwerking* in Nederland zijn redenen tot zorg.

- a. Wisselwerking tussen kennisinstellingen en bedrijfsleven kan bestaan uit: gezamenlijke laboratoria, spin-offs van kennisinstellingen; licentiering; uitbestede onderzoekscontracten; mobiliteit van onderzoekers tussen bedrijfsleven en kennisinstellingen; co-publicaties;

conferenties, beurzen, gespecialiseerde media; informele contacten binnen professionele netwerken; stromen van afgestudeerden van kennisinstellingen naar bedrijfsleven en incubators of science parks (OECD 2002).

- b. NB: Philips is momenteel de grootste R&D investeerder in NL, met R&D ter waarde van c. €1 miljard: de gecombineerde top7 bedrijven (Philips, Akzo, Shell, ASML, DSM, Unilever, OCE) verzorgen c. €2.5 miljard of 65% van in totaal private R&D van c. €4 miljard. Overheid heeft een R&D inspanning van c. 9 miljard. In geval Philips c.s. uit Nederland zouden vertrekken, leidt dit aldus tot een sterke afname met c. 30% van het totale R&D budget in NL.

### **Conclusions:**

- The Netherlands have set their ambitions on becoming a leading European Knowledge-Society in 2010 by stimulating innovation and developing technological know-how. Recent trends however indicate that the lack of public-private cooperation, combined with a low rate of mobility and intake of Technology and Science professionals and limited investments by corporates in R&D, have resulted in a deterioration of the international competitive position of The Netherlands.
- Furthermore, private research is concentrated with Top7 companies (65% of total €4 billion): of these, Philips accounts for €1 billion. Should Philips and/or the other Top7 corporates decide to relocate their R&D to another country, this would thus result in a further blow to the R&D efforts (in total estimated at c. €9b in 2004) and thus technology development capabilities for the Low Lands.

## 8 Ethnic migration and integration (CP)

5. Asylum and economic migration are expected to decline over time and emigration (of autochthones and allochtones alike) is expected to grow as a result of economic stagnation. However, owing to family reunions and higher birth rates of allochtones mainly, the % of non-western allochtones is expected to increase from 10.4% (2005) to 16.6% in 2050, while the % of autochthones is expected to decrease from 80.9% to 70.3% during this period {CPB}.
- Historic growth 1972 - 2005:
    - i. Non-Western allochtones: virtually 0% to 10.4%
    - ii. Allochtones: x% to 80.9%
  - Forecast growth 2005 – 2050:
    - i. Non-Western allochtones: 10.4% to 16.6%
      - 1. Traditionals: 8.4% to 12.6%
      - 2. Asians: 2% to 4%
    - ii. Allochtones: 80.9% to 70.3%
  - NB: of all Non-Western allochtones, c. 54% is Muslim (2004), which is 1%-point higher than in 1995 {CBS}.
6. Overall, the resistance against a multicultural society has grown between 1997 and 2003. In general, both autochthones and allochtones hold a more positive opinion on autochthones rather than allochtones {CPB, pg 195}.
7. The majority of non-Western allochtones is living in the Randstad, i.e. mainly in Big4 cities. The overall percentage of allochtones in Big 4 cities has grown from 36% (1995) to 43%, of which 31 percentage-points are non-Western allochtones (2003) {Forum.nl}. Furthermore, the ethnic concentration of non-Western allochtones within these cities has increased: in 2004, c. 10% of neighbourhoods in Big 4 cities comprises > 50% non-Western allochtones {CPB}.
- Concentrated Neighbourhoods are prone to less social cohesion, social degeneration ('verloedering') and increases in social nuisance/trouble

(‘overlast’). On average, criminal rates are higher and people feel less secure.

8. Besides concentration in all Big4 cities, segregation of non-Western allochtones furthermore increased in Amsterdam and Utrecht over the period 1994 to 2005. As a result of increasing concentration and segregation in Big 4 cities, chances for social interaction moments between allochtones and autochthones have decreased in all Big4 cities from 1995 to 2004 {CPB, pg 134}.

- E.g. Rotterdam:
  - i. Turkish vs. autochthones: 48.2% to 37.3%
  - ii. Moroccans vs. autochthones: 50.9% to 39.5%
  - iii. Surinams vs. autochthones: 58.9% to 47.5%
  - iv. Antillians v.s autochthones: 75.8% to 48.9%
- However, actual contacts between allochtones and autochthones have not changed significantly over the same period and the perceptions of both allochtones and autochthones regarding ethnical distances (excl. marriage considerations) (‘ethnic distance’) have been reduced {CPB, pg 110}.

### **Conclusions:**

- The % of non-Western allochtones as part of the Dutch population is forecast to increase from 10.4% (2004) to 16.6% in 2050
- Historic allochtone growth has been concentrated in Big4 cities: the % of allochtones in these cities increased from 36% (1995) to 43% (2004)
- Within Big4 cities, concentration and segregation of non-Western allochtone neighbourhoods has increased



## 9 Muslim fundamentalism (CP)

3. With respect to Muslim culture, c. 50% of both Muslim and autochthon people believe that the Muslim and Western culture can not be integrated easily – this % has remained fairly stable over time. On other aspects of Muslim culture, the opinion of the wider Dutch society has become more negative from 1998 to 2004, specifically regarding Muslims' ability to contribute positively to society and their respect for other cultures;
  - Ability to contribute positively to society: 45% to 34%
  - Showing respect for other cultures & habits: 51% to 36%
2. Overall it appears that certain parts of Muslim societies are becoming more radical as a result of the preaching of salafism which promotes a puritan Islamic life and comprises strong anti-Western attitudes {AIVD}. While these preaching were originally taking place in mosques mainly, external media/governmental pressure in recent year has resulted in the situation that the mosques are openly preaching more moderate lifestyles – the discussion of salafism however still continues, however via anonymous media such as internet and within closed ethnic circles. The increasing popularity of salafism is the result of a variety of factors:
  - International conflicts against Muslim populations create a strong feeling of outrage amongst specifically younger Muslims
  - Feeling of increasing discrimination within in The Netherlands, e.g. as a result of politicians and opinion makers who have been openly negative about Muslim society
  - Absence of (political) organizations with a strong back-up of Muslim society

### Conclusions:

- Muslim fundamentalism has increased in recent years as a result of international conflicts against Muslim countries, perceptions of increasing discrimination and absence of political (Muslim) organizations

## 10 Extreme political parties (CP)

1. Following the general unhappiness of Muslim society, the Arabic European League (AEL) gained a fairly good stronghold in Muslim society in 2003, which was however not continued into 2004. In 2004, its main activities were focused on the start-up of the Muslim Democratic Party (MDP), which should participate in local governmental elections in 2006.
2. Left wing activism has declined in recent years – in 2004, the movement could be characterised as lethargic, with only a limited number of isolated and harmless events (egg incident vs. Minister Verdonk).
3. Animal health activism is still mainly characterised by moderate activities such as demonstrations and peaceful blockages. Only a very limited number of more radical outings occurred, which took the form of setting fire to certain places: in general, these more radical outings appear to be declining however.
4. Extremist right wing and neo-nazi parties such as Nederlandse Volks Unie and Radical Volunteer Force, are limited in seize and operate in isolation. Extremist right expressions are currently mainly exemplified by unorganized groups of individual and subcultures such as e.g. the Lonsdale Youth. While currently still fairly innocent, these youth could provide an interesting recruitment opportunity for (new) extremist right political parties.

### Conclusions:

- AEL is working on the start-up of the Muslim Democratic Party to participate in 2006 elections. Political activities of other left/right wing extremist groups are limited

## 11 Criminality (CP)

2. Over the last year, the number of criminal acts declined from 5 million to 4.8 million – these acts mainly comprise of vandalism (1.8 million), theft and burglary (1.7 million) and violent crime ('number of violence acts': 1.1 million). The overall decline was caused by a reduction in burglaries, offset by an increase in violent crime.
  - While it is anticipated that criminal acts such as burglaries will further decline owing to increased use of improved technologies, it is unclear how vandalism and violent crimes will develop: this is dependant on a.o. the number of youths who feel disintegrated from society at large. Potential positive impacts of integration initiatives in this area are yet unproven.
  - A vast majority of the Dutch (75%) however anticipate that violent crime will have increased in 2020. As a result, almost 100% of the Dutch would like to see more severe punishments for this type of criminality.
3. Criminality rates amongst youngsters (18-24 yrs) are relatively higher for (non-Western) allochtones than autochtones: in 2004, 35% of all youngsters detained was born in a non-Western country (of which 18 %-point Moroccan, 13%-point Antilles) {CPB}. However, from 2000 to 2004, the % of autochthon youngsters detained increased significantly:
  - Autochthones (incl. 2<sup>nd</sup> generation allochtones): from 48% to 55%;
  - Non-Western allochtones: from 44% to 35%.

### Conclusions:

- Overall crime rate declined, however violent crime has increased in recent years. Consequently, 75% of the Dutch anticipate a further increase in violent crime in 2020

## 12 Terrorist threat (CP)

4. While (European) Islamic terrorism has been around since 1990's already, a new trend has emerged in recent years, which implies that Islamic terrorism is now being created from within European countries rather than from outside only. The situation in Iraq aggravates this threat in two different ways:
  - General feelings of hate towards Western countries 'waging war against Muslims'
  - Return of Muslim veterans as time passes, who are highly skilled in waging guerrilla wars and organizing attacks;
5. In recent years, terrorism has started to become a more autonomous activity, organized by locally active cells and networks rather than orchestrated in international contexts: this results in a more complex and diffuse terror threat. Interaction with international networks of veteran Muslim extremists furthermore complicates and diffuses the overall threat.
  - a. Financing of local cells takes place by means of local money, which is generated from increasing criminal activities – the resulting interaction between criminality and terrorism increases the complexity and size of the terrorist threat.
6. Recruitment of terrorists mainly takes place in mosques, ethnic closed circles, prisons (mainly S. Europe) and by means of internet. Recruits are mainly found in 2<sup>nd</sup> and 3<sup>rd</sup> generation young Muslims, who are not fully integrated and who feel being discriminated.

### Conclusions:

- Terrorist threat has grown and is now being created from within European countries rather than from outside. The start of locally active cells complicates and diffuses the war against terror
- Terror and criminality become intertwined, as local cells are financed by means of money derived from criminal acts

## 13 Feeling of security, NCTb (CP)

2. The threat of terrorism has had a significant impact on people's feeling of security: over the past year, the number of people who fear a terrorist attack has doubled from 25% to 55% (Nationaal Coordinator Terrorism Bestrijding – NCTb).
  - Besides the direct fear of getting involved in such an attack, people fear the consequences on Dutch society of such an attack: in general, a further division of ethnic groups (especially Muslim vs. Non-Muslim) is anticipated.
3. Confidence in governmental communication regarding terrorism has declined from 51% (2004) to 43%. Also, confidence in government's dealing with the threat of terrorism has declined from 42% (2004) to slightly over 25% (2005).
4. Besides the fear for terrorist attacks, the overall feeling of safety at specific locations and with respect to e.g. criminality has remained fairly stable over the past year.
  - The % of people that feels 'often unsafe' declined from 7% (1995) to 4.5% (2004) {SCP – Politiemonitor}.

### Conclusions:

- Overall feelings of 'frequent unsafe-ness' declined within Dutch population from 1995 to 2004. However, the number of people who fear a terrorist attack doubled over the past year

## 14 European integration (MT)

- European integration started for an important part as a reaction to the second World War, because there was no unity, there became war. This was a political reason, where the **building blocks were economic**.
- After long years of **peace and prosperity** in western Europe, together with the collapse of the Soviet threat, make further European integration seem much less urgent.
- The very depth of the political integration achieved so far has caused something of a backlash as the EU has gained new powers that threaten deeply rooted national traditions (fields such as frontier controls and fiscal policy). Also expansion led to an increased political diversity that can also often seem harmful for a **national identity**. The speed of expansion strengthens this feeling. European integration (compared to the USA) is limited by the lack of a common language, common history (leading to national identity) and the fact that Europeans citizens are homebodies (only 1,6% lives outside their home country to work or study). Immigration and often Muslim immigration also harm the feeling of national identity.
- People expect prosperity and jobs from Europe. The current **economic downturn** and need for economic reform work against European integration.
- Many economists think the EU has played a crucial role by creating a secure legal environment for business and enabling European **companies** to reap the economies of scale previously available only in the United States. This led to the prosperity that European citizens value so much.
- It will be that European citizens, facing difficult economic times and the erosion of their much-loved “**European social model**”, decide to put some of the blame on the Union itself. **Too fast liberalisation** and **globalization** are seen now as reasons for unemployment and a possible downturn of economy.

### Conclusion:

The current trend to stop a European integration, fed by a feeling of losing national identity and losing prosperity could actually strengthen the downwards trend of

prosperity as it is especially businesses that benefit from the economies of scale and unified legislation that an integrated Europe can offer.

#### Most important driving forces

- Social security (Unemployment) (18): higher unemployment leads to less European integration on the short terms, on the longer term people might understand that a combined Europe is stronger than 1 country. Employment follows GDP growth, this is uncertain, though on the longer term demographics determine a lower unemployment rate.
- Social security (pension & health payment) (19): lowered payments leads to less European integration on the short terms, on the longer term people might understand that a combined Europe is stronger than 1 country. Expectations for pension & health payments are that they will be lowered as demographics determine that the current amounts are not sustainable.
- National identity (20): a higher national identity feeling lowers the need for European integration.
- GDP (21), slowdown of GDP growth leads to less European integration on the short terms, on the longer term people might understand that a combined Europe is stronger than 1 country. Expectations are very uncertain

## 15 Economic globalization (MT)

- The next society will be a knowledge society. Knowledge will be its key resource, and knowledge workers will be the dominant group in its workforce. Its three main characteristics will be:
  - Borderlessness, because knowledge travels even more effortlessly than money.
  - Upward mobility, available to everyone through easily acquired formal education.
  - The potential for failure as well as success. Anyone can acquire the “means of production”, ie, the knowledge required for the job, but not everyone can win.
- Global prosperity today depends overwhelmingly on American demand. If it were to drop significantly, the world would tumble into recession. China's catch-up in income and its integration into the world economy could be the single biggest driver of global growth over coming decades.
- Global integration might stall if the risk and cost of doing business abroad rises (perhaps as a consequence of heightened fears about security, : higher insurance premiums, longer delays at borders and higher transport costs are all possible sources of a “security tax), or if governments once more turn their backs on open trade and capital flows (protectionism).
- Unemployment in the rich world has reminded people of its inherent tendency to create inequality and of the disruptive effect on existing jobs when poor countries such as China or India succeed in growing richer. Political tensions between America and Europe as well as between the few rich countries and the many poor, especially (though not only) in Muslim countries, lead many to doubt whether further international integration is viable

### Conclusion:

Main driving forces for the future are:



- **Openness in trade agreements** (22) leads to easier globalization, uncertain prediction as companies benefit from globalization but governments have citizens to take care off.
- Possession of knowledge (23), openness in knowledge sharing leads to easier globalization, It is unlikely that many knowledge is shared, governments as well as companies try to protect their intellectual property.
- **GDP fluctuations** (coming from American demand & China's domestic market) (24), slowdown in GDP growth of America and China are likely to decrease global economic globalization, GDP fluctuations are uncertain to predict
- changes in unemployment rate (25): more unemployment is the Lowlands will decrease an urge towards globalization, expectations are usually linked to GDP, low or negative GDP growth leads to negative employment growth
- terrorism (26). More terrorism leads to a slowdown in economic globalization, expectations are that terrorism will be part of our life the coming 20 years.

## 16 Gap between rich & poor (MT)

- if the world's poor see the world's rich getting ever farther ahead of them, they may begin to object. "The result is a lot of unemployed and angry young people, to whom new information technologies have given the means to threaten the stability of the societies they live in and even to threaten social stability in countries of the wealthy zone."
- rise in inequality knows 4 causes: faster growth in rich countries than in poor; faster population growth in poor countries; stagnation in Africa, rural China and rural India; and a rapidly widening gap between urban China, on one hand, and rural China and rural India on the other. Behind these factors he conjectures that there are deeper causes, and one above all: "technological change and financial liberalisation result in a disproportionately fast increase in the number of households at the extreme rich end, without shrinking the distribution at the poor end."
- Sub-Saharan Africa plainly suffers not from globalisation, but from lack of it. The focus of attention should be on how to extend the benefits of international economic linkages to the region. Removing every rich-country barrier to trade with these countries would be an excellent place to start.
- Openness to foreign trade and investment should encourage capital to flow to poor economies.
- Capitalism is needed for a good inflow of FDI, as these countries need to be able to guarantee property rights.

### Conclusion:

The main driving forces are

- degree of capitalism (29): more capitalism leads to a smaller gap between rich & poor, expectations are that property rights are likely to improve in poor countries.
- the degree of **protectionism** (27): more protectionism increases the gap between rich & poor, uncertain expectations

- access to technology (28). Better access decreases the gap between rich & poor. As technology becomes cheaper, it is likely that poor countries will have better access in the future.

## 17 Globalization of labour markets (MT)

- Europe is rich in regulations that are intended to help people but can often hurt them. Generous unemployment benefits, for instance, may provide a welcome safety net for people who lose their jobs, but they have costs too, not only in the taxes needed to finance them but also in perverse incentives for the unemployed to avoid work.
- technological and geographical constraints will continue to keep many service-sector jobs close to the customer
- A report by Forrester Research guesses that 3.3m American service-industry jobs will have gone overseas by 2015—barely noticeable when you think about the 7m-8m lost every quarter through job-churning. And the bulk of these exports will not be the high-flying jobs of IT consultants, but the mind-numbing functions of code-writing.
- Thanks to the spread of the internet, along with cheap and abundant telecommunications bandwidth, businesses are able to hand over more white-collar work to specialist outside suppliers, in the same way as manufacturers are doing already. A growing number of specialists offer, say, corporate human-resources services, credit-card processing, debt collection or information-technology work.
- China and India offer large bases of higher skilled workers.

### Conclusion:

The main driving forces are

- More technology (30) is an enabler for globalization, expectation is that technological innovation is unstoppable
- Education for service related jobs (31), labour can only be moved if the remote labour force has the right skills, expectation is that China and India will be able to offer companies skilled employees.
- differences in labour cost (WAAR PLAATSEN?), if these are large enough, it can be an incentive for organisations to move labour and so stimulate

globalization, expectation is that in India and China the wages will rise, still the gap is huge and will likely not be closed in the coming 10 years.

- Freight charges (WAAR PLAATSEN?), manufacturing in a remote area of the world likely increases freight costs, if these costs are too high, it is not worthwhile moving labour.

## 18 Market protection (MT)

- Europeans increasingly associate “globalisation, the rise of China and the loss of jobs and security.
- The decline of farming as a producer of wealth and of livelihoods has allowed farm protectionism to spread to a degree that would have been unthinkable before the second world war. In the same way, the decline of manufacturing will trigger an explosion of manufacturing protectionism—even as lip service continues to be paid to free trade
- China's integration promises vast benefits for the global economy, but it comes at an awkward time. During the 1990s, protests against globalisation, though vocal, were relatively ineffective. Political pressure for protection in rich countries was subdued as economies boomed. Now, with weak economic growth and higher unemployment, the potential for protest is much greater. The loss of blue-collar and, increasingly, white-collar jobs is more keenly felt as firms outsource or move their factories abroad. In poor countries, too, the “China threat” seems more acute when export markets are weak.

### Conclusion:

The main driving forces are:

- degree of unemployment (32): higher degree leads to more market protection, expectations are usually linked to GDP, low or negative GDP growth leads to negative employment growth
- lower **GDP growth** for the Lowlands (33) as a result of globalisation leads to more market protection, expectations are very uncertain

## **19 Bureaucracy (MT)**

### **Conclusion:**

No strong link between society and bureaucracy has been found. Also for GDP growth bureaucracy is not an important driving force. Example is China that knows quite some bureaucracy and need for political involvement, but still has a high GDP growth.

## 20 Employment (MT)

- When productivity slows, workers do not immediately react, continuing instead to demand wage increases in line with the old rate of productivity growth. When wages are therefore too high, two things happen. First, profits are squeezed, so firms cut jobs and switch to more capital-intensive production, increasing unemployment. Second, since costs are higher, firms not only use less labour relative to capital, but also cut investment. In the long run, this further reduces the demand for labour, because firms have less machinery and equipment to operate.
- Low employment is often the fault of misguided policies that discourage people from working, such as high payroll taxes; marginal income taxes that penalise the work of a lower-paid spouse; rules that make sacking workers expensive; and generous benefits that encourage the work-shy to be classed as disabled.
- Generous unemployment benefits may provide a welcome safety net for people who lose their jobs, but they have costs too, not only in the taxes needed to finance them but also in perverse incentives for the unemployed to avoid work. Laws requiring big severance payments for sacked workers help people hang on to jobs, but also make firms less likely to hire in the first place. High minimum wages make some workers better off, but at the cost of reducing the overall supply of jobs and leaving some would-be workers out in the cold.
- according to the OECD's figures there remains a clear and strong correlation between high levels of employment protection and high levels of unemployment and inactivity.
- Greater flexibility in hiring and firing, lower taxes and lower welfare benefits are the way to cut unemployment.

### Conclusion:

The main driving forces are:

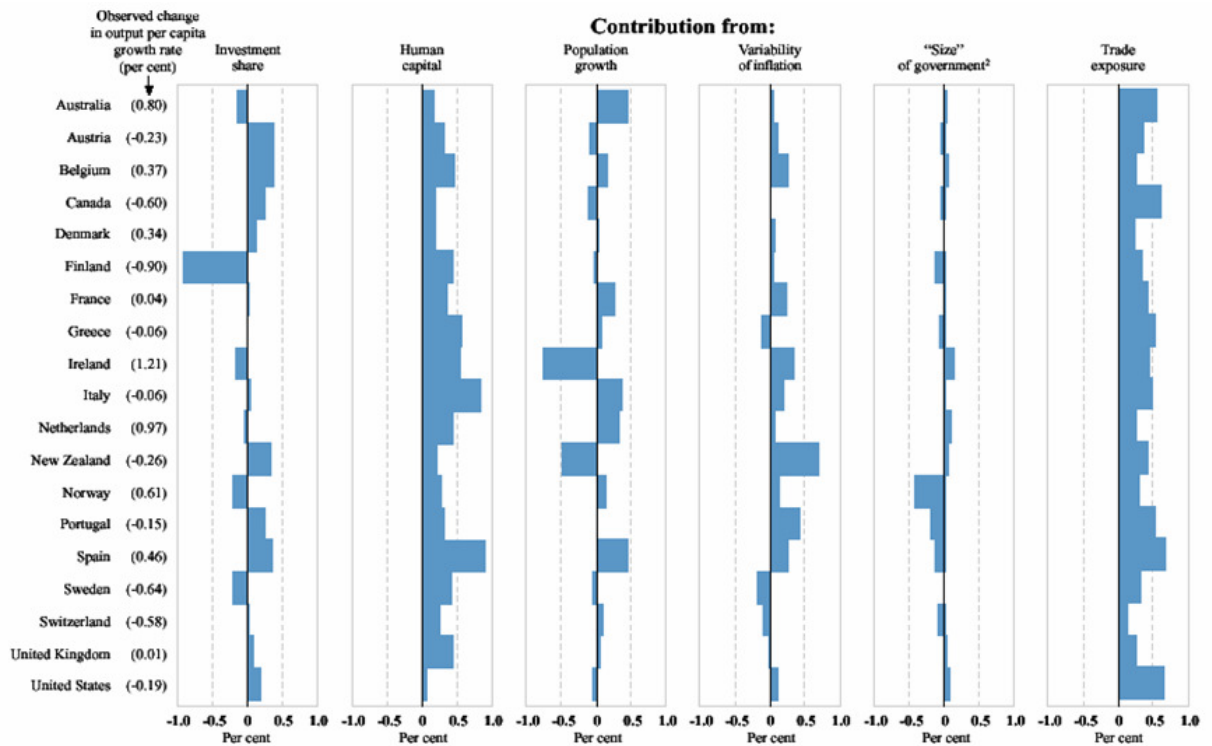
- Productivity: higher productivity increases unemployment, expectation is that technological innovations will continuously increase productivity.



- **Job protectionism:** higher protectionism increases unemployment, expectations are that social reform in Europe is necessary to lower job protectionism
- **Labour Cost:** Higher labour cost increases unemployment, Europe tries to lower labour cost to stimulate employment.
- **GDP growth:** GDP growth stimulates employment, uncertain prediction.

## 21 GDP (MT)

- Because of its less favourable demographics, Europe has an older economy than America. With lower birth and immigration rates and an ageing population, Europe's labour force will soon start to shrink as a share of the population. That will make it harder for Europe to maintain its current pace of growth in GDP per person—and thus harder for governments to pay pension bills. Without faster growth, Europe will be unable to afford its welfare system.
- When interest rates are higher than the rate of growth in nominal GDP, monetary policy is restrictive; when interest rates are lower, policy is expansionary
- It has become accepted wisdom that monetary policy is more appropriate than fiscal policy for stabilising economies. Monetary policy is much easier to reverse than spending increases or tax cuts, a crucial point given many countries' worrying long-term budgetary positions.
- A big part of the explanation for the Dutch slowdown is the global economy. The Netherlands is one of the most open, trade-oriented countries in the world; when the world economy slows, as it did in early 2001, so does the Dutch economy. It is particularly exposed to its giant neighbour, Germany, whose economy has also slowed sharply in the past year. And it is also unusually exposed to the United States; not only does it trade extensively with America, but the two countries also invest heavily in each other
- OECD investigated the factors influencing economic growth:
  - Business investment rate
  - Human capital (measured as 'educational attainment')
  - Population growth
  - Variability of inflation
  - Size of government
  - Trade liberalisation



## Conclusion:

The main driving forces are:

- Demographics
- FDI
- Market protectionism

## 22 General health (PP)

General health				Netherlands			Belgium			
<b>Doodsoorzaken</b>				<b>1996</b>	<b>2004</b>	<b>Trend</b>				
Totaal aangeboren afwijkingen (absoluut)				629	532	-15,4%				
Totaal niet-natuurlijke doodsoorzaken (absoluut)				5309	5226	-1,6%				
Totaal psychische stoornissen (absoluut)				4173	6513	56,1%				
Totaal zktn van hart en vaatstelsel (absoluut)				51313	44638	-13,0%				
<b>Kortdurige aandoeningen</b>				<b>2000</b>	<b>2004</b>	<b>Trend</b>				
Beddagen per jaar (Dagen)				3,9	4	2,6%				
Per jaar activiteitenbeperking (Dagen)				31,2	37,5	20,2%				
<b>Langdurige aandoeningen</b>				<b>2001</b>	<b>2004</b>	<b>Trend</b>				
Astma, chronische bronchitis, CARA (%)				7	7,3	4,3%				
Chronische eczeem (%)				4,5	4,4	-2,2%				
Gewichtsslijtage (%)				8,2	9,6	17,1%				
Hartaandoening (%)				1,2	1,5	25,0%				
Hoge bloeddruk (%)				8,6	9,9	15,1%				
Migraine (%)				14,2	11,9	-16,2%				
Rugaandoening (%)				8,1	9,1	12,3%				
Suikerziekte totaal (%)				2,8	3,1	10,7%				
<b>Alcoholgebruik</b>				<b>2001</b>	<b>2004</b>	<b>Trend</b>	<b>1997</b>	<b>2001</b>	<b>Trend</b>	
Gemiddeld 3 of meer glazen per dag (%)				11,3%	8,7%	-23,0%	Drinkt regelmatig veel	2,7%	3,4%	25,9%
Gemiddeld aantal glazen dd.pp bevolking (aantal)				1,2	1,1	-8,3%	Drinkt dagelijks	8,0%	12,4%	55,0%
Zware drinker (%)				13,6%	11,9%	-12,5%	Drinkt nooit	15,1%	18,9%	25,2%
<b>Lichaamsbeweging</b>				<b>2001</b>	<b>2004</b>	<b>Trend</b>				
Totaal sportbeoefening (minuten per week)				130	134	3,1%				
Voldoen aan norm gezond bewegen (%)				52,0%	53,0%	1,9%				
Vrijtijdsactiviteiten (minuten per week)				413	404	-2,2%				
Woon-werk of woon-school verkeer (minuten per week)				54	58	7,4%				
<b>Gewicht</b>				<b>2001</b>	<b>2004</b>	<b>Trend</b>				
Ernstig overgewicht (%)				9,3%	10,9%	17,2%				
Normaal gewicht (%)				53,5%	51,7%	-3,4%				
Ondergewicht (%)				1,7%	1,7%	0,0%				
Overgewicht (%)				44,8%	46,5%	3,8%				
<b>Roken</b>				<b>2001</b>	<b>2004</b>	<b>Trend</b>	<b>2001</b>	<b>2004</b>	<b>Trend</b>	
Rokers (%)				33,3%	29,6%	-11,1%	Dagelijkse rokers	28,0%	20,0%	-28,6%
Zware rokers onder bevolking (%)				9,8%	7,4%	-24,5%				
<b>Ervaren gezondheid</b>				<b>2000</b>	<b>2004</b>	<b>Trend</b>	<b>1997</b>	<b>2001</b>	<b>Trend</b>	
Goed (%)				54,5	54,9	0,7%	Goede tot zeer goede gezondheid	78,30%	77,20%	-1,4%
Minder dan goed (%)				19,6	19,6	0,0%	Zeer slechte tot redelijke gezondheid	21,70%	22,80%	5,1%
Zeer goed (%)				25,9	25,5	-1,5%				

### Main figures

2001-2004: Decrease of alcohol abuse with 20%

2001-2004: Decrease smokers (11%) and heavy smokers (25%)

1996-2004: Increase deaths caused by mental illness with 56%

2001-2004: Increase hart disease patients with 25%

2001-2004: Increase high blood pressure patients with 15%

2001-2004: Increase diabetes patients with 10%

2001-2004: Increase number of people with heavy overweight with 17%

### Conclusions

- On the positive site, alcohol abuse and smoking is decreasing
- On the negative site, mental illness, hart diseases, blood pressure problems, diabetes and overweight problems are increasing

## 23 Pension and health payment (PP)

### Pension & health payment

### Netherlands

Pensioen	1997	1998	1999	2000	2001	2002	2003	Trend
Pensioenpremies totaal eigen rekening (mln euro)	12982	15318	16544	19032	22405	36502	40608	212,8% = Stijging 1997-2003
Actieve deelnemers (x 1 000)	9070	9624	9961	10652	11496	12514		38,0% = Stijging 1997-2002
Gewezen deelnemers (x 1 000)	11947	12329	12644	13090	14332	14914		24,8% = Stijging 1997-2002
Totaal pensioentrekkenden (x 1 000)	3769	3877	3994	4102	4356	4436		17,7% = Stijging 1997-2002

Zorgpremies	2003	2004	Stijging in 1 jaar
Financieringsbronnen; Overheid en sociale verzekeringen (mln euro)	38949	40376	3,7%
Financieringsbronnen; Overige financieringsbronnen (mln euro)	10364	10733	3,6%
Financieringsbronnen; Particuliere zorgverzekeringen (mln euro)	7822	8470	8,3%
Financieringsbronnen; Totaal financieringsbronnen (mln euro)	57136	59579	4,3%
Uitgaven als percentage van het BBP (%)	12,6	12,8	1,6%
Uitgaven per hoofd van de bevolking (euro)	3521	3661	4,0%

- The Netherlands will adopt a new health payment system from 1 January 2006 onward. The average payments are expected to increase with EUR ?? (= ??%)
- In public debates, pension and health payments are a hot issue, since these payments are expected to increase dramatically in the coming decades.

### Main figures

1997-2002: increase no. of pensioners with 18%, whereas the total of private pension payments increase was 213%

2003-2004: increase of private healthcare payments with 8%

### Conclusions

Both the pension and health payments have increased dramatically and in public debates, these are expected to rise dramatically the coming decades.

## 24 Healthcare level (PP)

Healthcare level		Netherlands									
<b>Ziekenhuizen</b>		<b>1993</b>	<b>1994</b>	<b>1995</b>	<b>1996</b>	<b>1997</b>	<b>1998</b>	<b>1999</b>	<b>2000</b>	<b>2001</b>	<b>Toename 1994-2001</b>
Aantal instellingen (absoluut)		154	152	148	146	143	286	272	262	258	69,7%
Gem. feitelijke bedden (absoluut)		0	59912	58938	58135	58161	115650	114448	110876	106494	77,8%
Totaal FTE's (absoluut)		139860	136860	138100	139140	280250	307430	315550	320540	328900	140,3%
Totaal werkzame personen (absoluut)		187910	187350	191160	194710	390020	432890	439830	451150	461200	146,2%
<b>Ervaringscijfers zorg (subjectief)</b>		<b>2001</b>	<b>2002</b>	<b>2003</b>	<b>2004 Toename 2001-2004</b>						
Goed (%)		55,5	55,2	54,7	54,9	-1,1%					
Minder dan goed (%)		19,2	19,4	19,5	19,6	2,1%					
Zeer goed (%)		25,3	25,5	25,8	25,5	0,8%					
<b>Thuiszorg instellingen</b>		<b>1999</b>	<b>2000</b>	<b>2001</b>	<b>2002</b>	<b>2003</b>	<b>Toename 1999-2004</b>				
Aantal instellingen (absoluut)		172	174	192	201	212	23,3%				
<b>Verpleeghuizen</b>		<b>1994</b>	<b>1995</b>	<b>1996</b>	<b>1997</b>	<b>1998</b>	<b>1999</b>	<b>2000</b>	<b>2001</b>	<b>2002</b>	<b>2003 Toename</b>
Aantal instellingen (absoluut)		330	329	330	332	336	334	334	333	328	335 1,5%
Dagbehandelingsdagen (x 1 000)		984	1031	1084	1141	1189	1274	1319	1459	1587	2022 105,5%
Aantal bedden (x 1 000)		54,4	55,2	56,4	57	57,5	57,6	58,4	59,7	59,9	61 12,1%
Patiënten per 31 december (x 1 000)		53,5	54	55,1	55,6	56	55,6	56,2	56,9	57,7	57,8 8,0%
Verpleegdagen (x 1 000)		19464	19841	20234	20340	20473	20805	21067	21706	22518	22852 17,4%
Totaal FTE's (absoluut)		62790	64530	66180	70070	71280	73280	76650	76930	76341	79957 27,3%
<b>Verzorgingstehuizen</b>		<b>1999</b>	<b>2000</b>	<b>2001</b>	<b>2002</b>	<b>2003</b>					
Totaal bewoners (absoluut)		107065	104113	102920	102089	100797	-5,9%				
Totaal capaciteit (absoluut)		112441	110668	109885	108933	108163	-3,8%				
Bezettingsgraad		95,2%	94,1%	93,7%	93,7%	93,2%	-2,1%				

### Main figures

1994-2001: Increase no. hospitals with 70%

1994-2001: Increase no. hospital beds with 78%

1994-2001: Increase no. FTE's in hospitals with 140%

1994-2003: Increase no. FTE's in nursing homes with 27%

2001-2004: Subjective experience of healthcare level stayed the same

### Conclusion

- The number of patients has increased dramatically from 1994 – 2001 (78%)
- The experienced quality of healthcare has stabilized in recent years

## 25 Average population age (PP)

### Average Population age

### Netherlands

	2010	2020	2030	2040	2050	Toename 2010-2030
Bevolkingsomvang (absoluut)	16.462.450	16.799.820	17.021.880	17.020.110	16.905.910	3,4%
Leeftijdsgroepen; % 0 tot 20 jaar (%)	23,9	22,5	22	22,5	22,5	-7,9%
Leeftijdsgroepen; % 20 tot 65 jaar (%)	61	58,6	55,7	53,9	55,7	-8,7%
Leeftijdsgroepen; % 65 jaar en ouder (%)	15,1	19	22,3	23,6	21,9	47,7%
Levensverwachting bij geboorte; Levensverwachting mannen (jaar)	77,54	78,37	78,82	79,17	79,56	1,7%
Levensverwachting bij geboorte; Levensverwachting vrouwen (jaar)	81,53	82,14	82,42	82,55	82,62	1,1%

### Begium

	2010	2020	2030	2040	2050	Toename 2010-2030
Bevolkingsomvang (absoluut)	10.529.690	10.723.828	10.894.228	10.964.632	10.952.581	3,5%
1-19 jaar	2.344.000		2.272.000		2.229.000	-3,1%
20-59 jaar	5.682.000		5.279.000		5.166.000	-7,1%
60-64 jaar	649.000		696.000		658.000	7,2%
65-69 jaar	482.000		718.000		621.000	49,0%
70-79 jaar	835.000		1.181.000		1.144.000	41,4%
80-89 jaar	469.000		613.000		865.000	30,7%
90-99 jaar	68.073		131.000		261.600	92,4%
100 jaar en meer	1.886		4.256		8.331	125,7%
Leeftijdsgroepen; % 0 tot 20 jaar (%)	22,3%		20,9%		20,4%	-6,3%
Leeftijdsgroepen; % 20 tot 65 jaar (%)	60,1%		54,8%		53,2%	-8,8%
Leeftijdsgroepen; % 65 jaar en ouder (%)	17,6%		24,3%		26,5%	37,9%

### Main figures

2010-2030: Expected increase of 65+ population with 43%

2010-2030: Expected decrease of 20-65 population with 9%

2010-2030: Expected decrease of 0-20 population with 7%

### Conclusion

The average population will increase dramatically the coming decades

## **26 Pandemic Flue (PP)**

- Influenza pandemic of 1918 is estimated to have killed at least 20 million people.
- A new influenza pandemic is conservatory expected to cause 2-8 million deaths.
- The pandemic affects mostly children and young adults
- Domestic ducks in southern China played a central role in the generation and maintenance of the virus.
- In 2005 duck fever has been established in Asia and it is already come to Europe (Hungary, Greece, Germany)
- There are huge differences in opinions whether a pandemic flue will cause many death people.

### **Conclusion**

There is a serious threat that a pandemic flue will attack the world. Whether the consequences are huge or very limited is very much under debate of the experts.



## 27 Resource scarcity (PP)

### 27.1 Water scarcity

**source - Aachen foundation:** Today already an estimated 26 countries with population of 300 million people suffer from water shortages. Predictions for the year 2050 say that 66 countries will face the problem in moderate to severe forms, comprising about two thirds of the world population. The consequences for economic and social development and political stability are immeasurable. As 70 per cent of fresh water is used in agriculture, scarcity has a direct impact on food production. Climate change is expected to worsen the problem.

**Source - International Food Policy Research Institute IFPRI:** Highlights from *Alternative Scenarios Global Water Outlook to 2025: Averting an Impending Crisis* presents three alternative future scenarios for global water supply and demand, and food production and consumption, based on the results of the IMPACT computer model. These projections demonstrate the effect of policies and priorities on the world water situation.

#### 1) BUSINESS AS USUAL SCENARIO

- By 2025, water scarcity will cause annual global losses of 350 million metric tons of food production-slightly more than the entire current U.S. grain crop.
- Consumption of water for all non-irrigation uses will rise dramatically, by 62 percent.
- Household water use will increase by 71 percent, of which more than 90 percent will be in developing countries, but many households will remain unconnected to piped water.
- Industrial water demand will increase significantly in developing countries and, by 2025, a major shift will occur: industrial water demand in the developing world will exceed the demand in developed countries.

- Water scarcity will cause substantial shifts in where the world's food is grown. Developing countries will dramatically increase their reliance on food imports. In sub-Saharan Africa, grain imports will more than triple. Poor countries, unable to finance imports, will experience increased hunger and malnutrition.

## **2) WATER CRISIS SCENARIO**

- Food production will decline significantly. Grain output will be 10 percent less than business as usual levels-the equivalent of annually losing the entire grain crop of India.
- Food prices will skyrocket. The price of rice will increase by 40 percent, wheat by 80, and maize by 120. Poor consumers in developing countries will not be able to afford the high prices, and malnutrition and food insecurity will increase substantially.
- In 2025, global water consumption will increase by 13 percent over business as usual levels, but much of this water will be wasted. Virtually all of the increase will go to irrigation.
- Worldwide, demand for domestic water will be 23 percent less than business as usual levels.
- By 2025, demand for industrial water will increase by 33 percent over business as usual levels, but industrial output will remain the same.
- Global environmental flows will decline substantially by 2025, dropping 460 cubic kilometers below business as usual levels.

## **3) SUSTAINABLE WATER SCENARIO**

- In 2025, total global water consumption will be 20 percent less than business as usual levels, and industrial water demand will decrease by 35 percent worldwide.
- Environmental flows will expand dramatically. Compared to the water crisis scenario, the increase is equivalent to five times the annual flow of the Mississippi River.

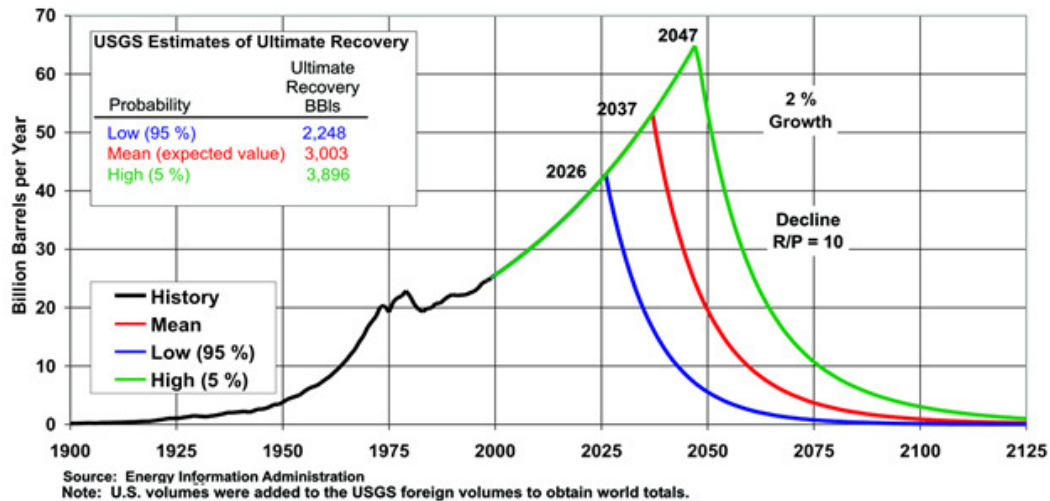
- Global rainfed crop yields will increase by 7 percent over business as usual levels due to breakthroughs in water harvesting systems and adoption of advanced farming techniques.
- Food production will increase slightly over business as usual levels, and shifts will occur in where the world's food is grown. Grain production will decrease by 10 million tons in developed countries and increase by 29 million tons in the developing world.
- For most crops, prices will decline slowly from 1995 to 2025.

## **Conclusions**

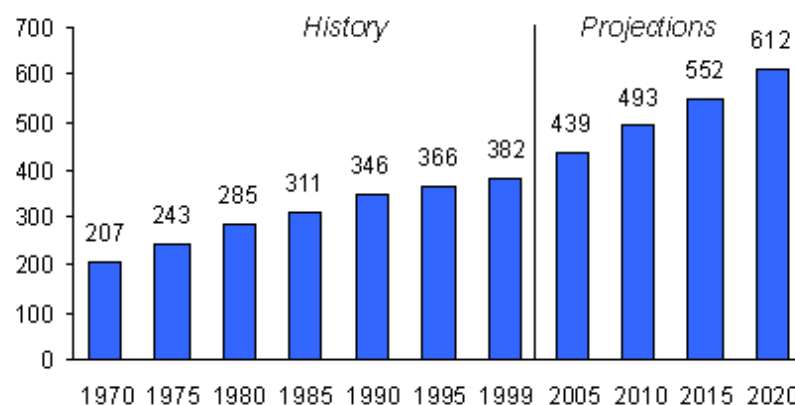
Water shortage will be an environmental and economical problem for the future.

## 27.2 World energy scarcity

**Figure 2. Annual Production Scenarios with 2 Percent Growth Rates and Different Resource Levels (Decline R/P=10)**



### Oil production



*World energy consumption: source - Official Energy Statistics from the U.S. Government*

### Conclusions

The expected energy consumption in 2020 is expected to be around 140% of the current consumption

The oil production is expected to dramatically drop after 2037, since the major oil reserves will than be finished.

## **28 Tax payments (CP)**

### **How does the government generate its revenues?**

Total budget revenues for the government are estimated to reach c.137,4 billion euro in 2006.

The tax income of the Dutch government is derived from three main sources:

- Taxes from corporate profits
- Taxes from private income payments
- Taxes from natural gas incomes

The first item is the result from companies' willingness to 1.) locate themselves into The Low Lands & pay taxes on profits (pending on favourable tax laws, availability of know-how, value adding labour etc.) and 2.) of companies' abilities to generate profit.

The second driver is the result of individuals earning potential.

The third driver is the income from natural gas export. A recent publication of CBS indicated that in 2004, 10% higher gas revenues were responsible for a 0.3%-point increase in GDP. At GDP of c. €500 bn, the extra 10% can thus be calculated to account for €1.5bn: in total gas revenues can thus be calculated to account for c. €15bn (government is very secretive about this figure!).

The announced additional output per jan. 05 by 20% thus results in €3 bn BNP growth in 2005: in total, 18 bn is generated. Revenues for the governmental budget are in total estimated to be appr. €4bn for the next years. Estimates on the size of the gas field and its exploitation due date currently estimate the end to be within 20 years, with total depletion in 2040 latest (TNO-NITG, see original text below).

Gasreserves

Volgens een medewerker van TNO-NITG (Nederlands Instituut voor Toegepaste Geowetenschappen) melden in januari dat het einde van de exploitatie van het gasveld

bij het Groningse Slochteren binnen 20 jaar in zicht komt en rond 2040 zijn vrijwel uitgput.

De komende jaren wordt de inkomstenstroom voor het ministerie van Financiën geraamd op € 4 mrd per jaar. Gezien de structureel hogere olieprijsen (die gekoppeld zijn aan de gasprijsen) kan dit bedrag nog oplopen (jan. 2005).

## Conclusions

The majority of the expected governmental income in 2020 is dependant on tax income from corporate and employee relationships. In addition, the gas income from exports contributes to GDP (c.3-5%) and governmental budget (c. 3% - note, imagine no gas and the governmental budget deficiency will > 3%!)): as the gas is expected to be finalized between 2025 and 2040, this may jeopardize governmental income at that time.

Appendix (srouce: CBS):

- Balans van in- en uitvoer, winning en verbruik ([terug](#))
  - In de onderstaande tabel zijn enkele gegevens van de 'aardgasbalans' van het CBS weergegeven over 2003 en 2004. De gegevens zijn in PJ (petajoules). Het CBS publiceert zijn gegevens in zgn. Petajoule (PJ). Met behulp van de eveneens door het CBS gegeven omrekenfactor van 1 petajoule die gelijk is aan 31,6 miljoen m<sup>3</sup> aardgas zijn de onderstaande gegevens in miljard kubieke meter aardgas (Gm<sup>3</sup>) aangegeven. Om enig 'gevoel' te krijgen bij de orde van grootte van de aantallen: er zijn in Nederland een kleine 7 miljoen huishoudens, die gemiddeld zo'n 2000 kubieke meter gas verstoken. Samen is dit een kleine 15 miljard kubieke meter per jaar, dus ongeveer 1/3e van het in onderstaande tabel aangegeven jaarlijkse binnenlands verbruik.

Aardgas: wat krijgen we er per jaar bij?	2003	2004	% bij/af
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**(Gm3)**

Winning	69,11	81,50	+18%
Import	24,14	17,85	-24%
<i>Totaal</i>	<i>93,25</i>	<i>99,35</i>	<i>+7%</i>

**Aardgas: wat gaat er per jaar af? (Gm3)**

binnenlands verbruik	47,65	48,63	+2%
Export	45,60	50,75	+11%
<i>Totaal</i>	<i>93,25</i>	<i>99,38</i>	<i>+7%</i>

*(het kleine verschil zit in een heel klein beetje  
voorraad-wijziging)*

## 29 International conflicts (CP)

What causes war? Why international violence? International Conflict? The answers are specific. *International Conflict Behavior* (as defined in [Table 4.4](#)) is caused by:

- opposing interests and capabilities (specific sociocultural differences and similarities between the parties),
- contact and salience (awareness),
- significant change in the balance of powers,
- individual perceptions and expectations,
- a disrupted structure of expectations,
- a will-to-conflict.

It is *aggravated* by:

- sociocultural dissimilarity,
- cognitive imbalance,
- status difference,
- coercive state power.

It is *inhibited* by:

- sociocultural similarity,
- decentralized or weak, coercive state power.

It is *triggered* by:

- perception of opportunity, threat, or injustice,
- surprise.

Source: [www.hawaii.edu/powerkills/WPP.CHAP16.HTM](http://www.hawaii.edu/powerkills/WPP.CHAP16.HTM)

Conclusions:

International conflicts are triggered by changes in the balance of powers, which is aggravated in case of social cultural dissimilarities and coercive state powers.

Therefore, increasing globalisation with potentially perceived threats of changes in balance of powers, the (continued) existence of coercive powers and a growing gap between different cultures (e.g. Muslim and non-Muslim) may result in a continuation of international conflicts over the next years.



### **30 Summary of relations between 8,9,10,11,12,13,28,29 (CP)**

1. An increase in the number of immigrants (in concentrated parts of the Big 4 cities in The Netherlands) is expected to have a negative impact on ethnic integration
  - a. Allochtones live mainly in concentrated areas of Big4 cities (Forum.nl; SCP)
  - b. Non Western allochtones to grow from 10.4% (2004) to 16.6% (2050) (SCP)
2. A decline in ethnic integration increases Muslim Fundamentalism
  - a. Decline in ethnic integration results in increase in feelings of discrimination, which fuels Muslim Fundamentalism (AIVD)
3. A continuation or increase of international conflicts against Muslim countries is expected to increase Muslim Fundamentalism
  - a. International conflicts against Muslims create strong feelings of outrage amongst specifically younger people, which fuels Fundamentalism (AIVD)
4. A continuation or increase of international conflicts against Muslim countries is expected to result in an increase of terrorism
  - a. Return of Muslim veterans from Iraq et. al. while time passes, who are angry and highly skilled in waging guerrilla wars and organizing attacks (AIVD)
5. An increase in Muslim fundamentalism is expected to result in increased threat of terrorism (AIVD)
  - a. Fundamentals start with local cells with focus on terrorism
6. An increase in fundamentalism is expected to result in an increase of extreme political parties
7. An increase of extreme political parties may result in (a legally organized outlet for Muslim people protest and thus may result in) reduced Muslim Fundamentalism

- a. Absence of political organizations with a strong back-up of Muslim society fuels Muslim Fundamentalism (AIVD)
- 8. An increase in terrorism is expected to result in an increase of criminality
  - a. Financing of local terrorist cells takes place by means of local money, which is generated from increasing criminal activities (AIVD)
- 9. A fairly constant level of criminality results in stable levels of security
  - a. Overall feeling of safety has remained fairly stable over the past year (NCTb)
- 10. An increased perception of terrorism has resulted in declining sense of security
  - a. Over the past year, the number of people who fear a terrorist attack has doubled from 25% to 55% (NCTb)
- 11. A decline in ethnic integration (i.e. concentration within Big4 cities) results in declining feelings of security
  - a. Concentrated neighbourhoods are prone to less social cohesion, social degeneration and social nuisance. On average, criminal rates are higher and people feel less secure (CPB)
- 12. A decline in revenues from gas field due to exploitation depletion will negatively impact existing GDP by c. 3% per year.
  - a. Depletion of gas field is estimated to be around 2020.