

Rotterdam School of Management  
Executive MBA program

## **Scenario Planning**

“The future of the Lowlands in 2025”

Four Scenarios

MB, MT, PP, CP, HD  
Group 1 - EMBA 05

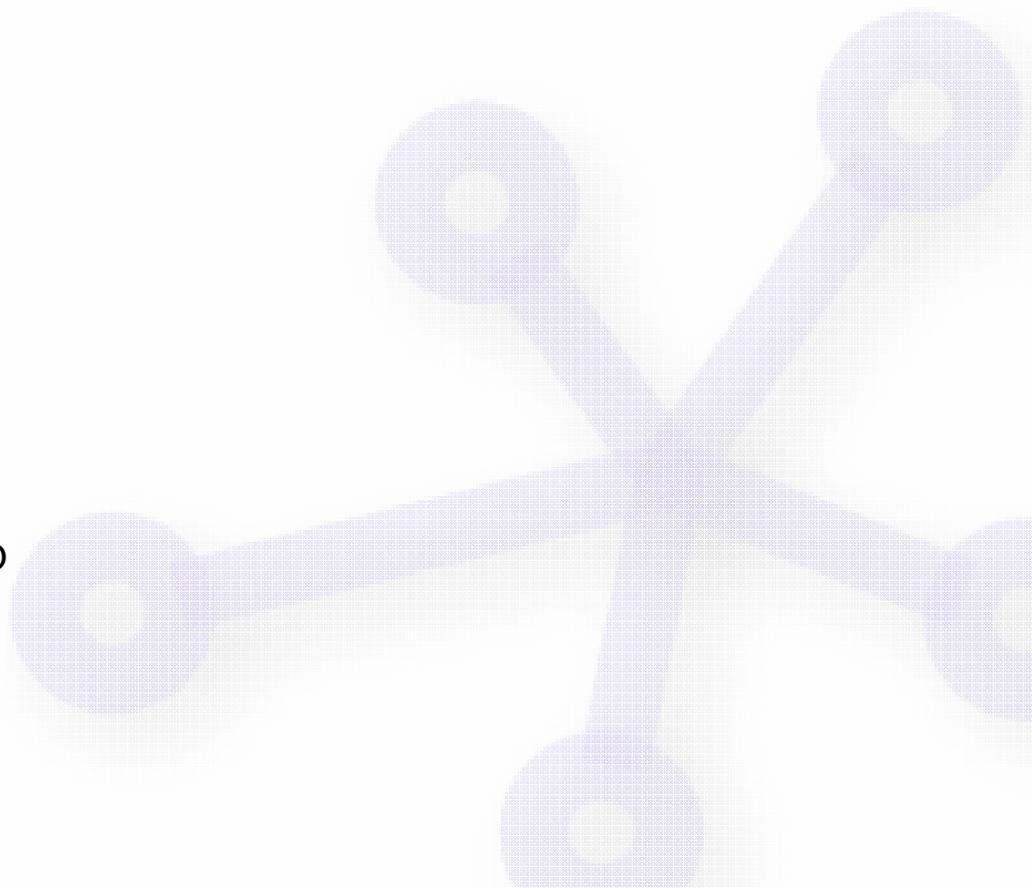
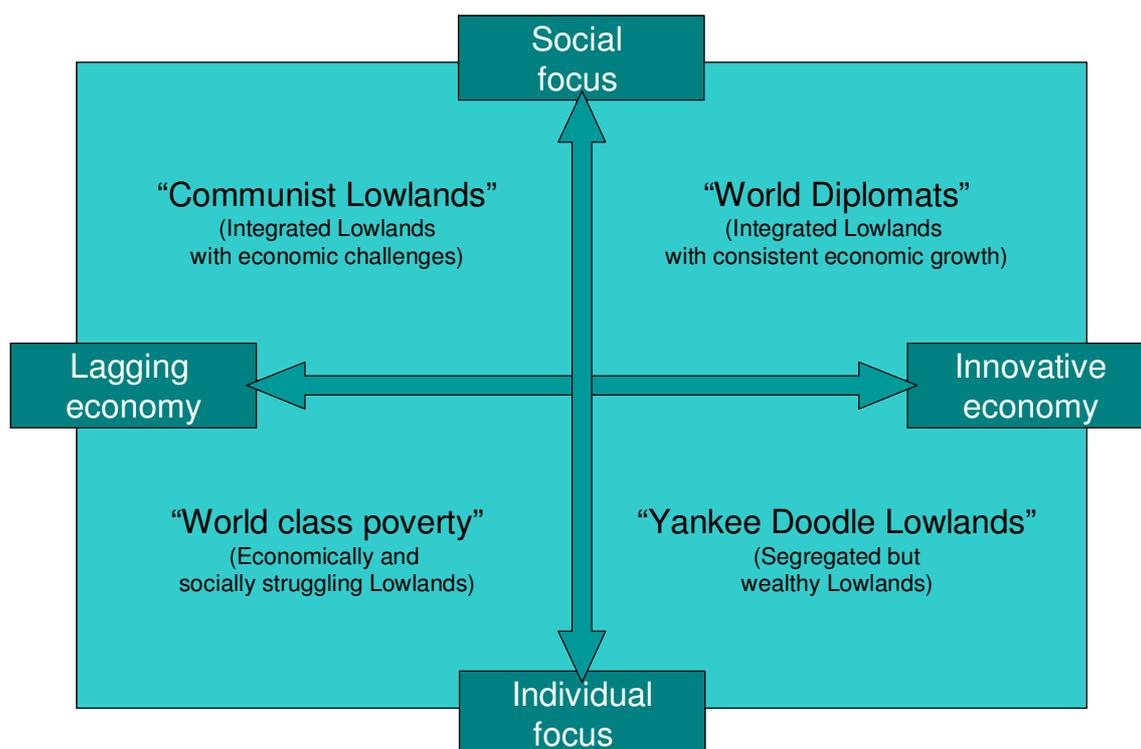


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## 1 Introduction of four scenarios

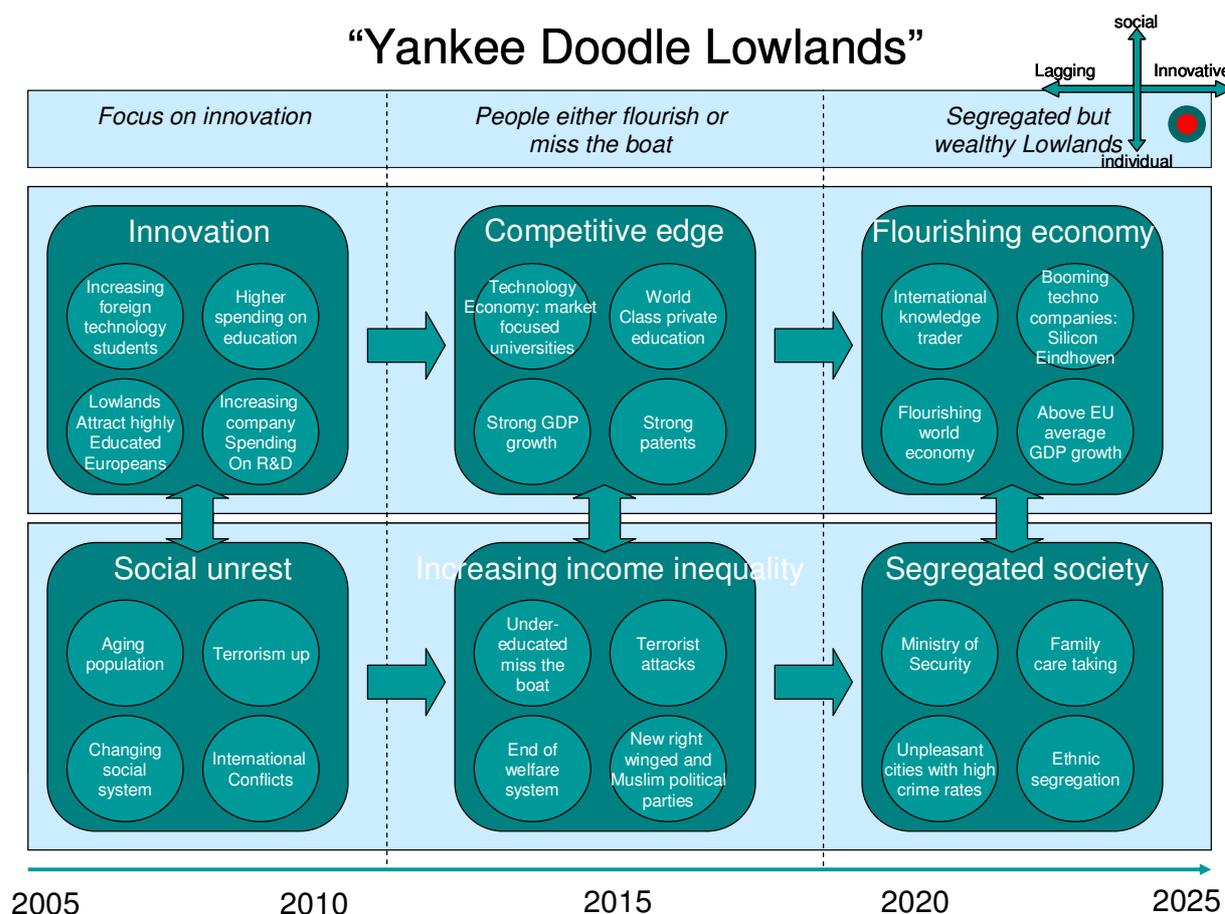
Following extensive research, four scenarios were developed with respect to The Future of The Lowlands in 2025. Below is a graphic summary of these four scenarios, which will be explained in further detail in the next sections of this report.



## 2 Scenario “Yankee Doodle Lowlands”

A graphic summary of this scenario is presented in section 2.1. A more detailed description of the scenario is included in section 2.2.

### 2.1 Graphic summary “Yankee Doodle Lowlands”



### 2.2 Detailed description “Yankee Doodle Lowlands”

#### Focus on innovation (2005 - 2012)

The Lowlands recognise the need to invest in the future. The government increases the money spent on education and gives incentives to technology students. The trend of declining technology students in the period 1995 – 2005 has been broken and each year the number of technology freshmen increases with 4%.

Technology based companies like Philips, Shell, ASML and ESA benefit from the increasing economic situation. They increase their R&D budgets with 35% to ensure their leading positions in the world. They focus on globalization and attract top scientists and top (inter)national PhD students for their innovation projects. Many of these PhD students are from the millennium generation, which means they developed excellent communication skills besides their technology skills. Universities and technology companies conduct combined research programs, where they develop new technologies. Since the technology companies and the universities work intensively together, these companies can select the best students to work for them.

Social integration becomes a major issue. The population is aging and the forthcoming financial challenges put pressure on the incomes for the elderly and the unemployed. Although the population in the middle and high segment incomes have good perspectives, the low income class has difficulty catching up in the technology based economy. The unrest is strengthened by international Muslim conflicts and terrorist threats.

### **People either flourish or miss the boat (2012 – 2018)**

The Lowlands gain a dominant competitive position in the world economy. They have outperformed the rest of Europe in terms of an annual 3% GDP growth. They flourish in technology and they keep their economical position in logistics and trade. The Lowlands also continue to be the main port of Europe.

Philips and ASML have become dominant global players for logistical solutions. They have patents on tracking- and tracing solutions. This technology is licensed to Asian countries, and the consulting segment greatly benefits from this. ESA conducts an ambitious space program, based on the technology of Philips and ASML.

The government identifies three pillars for further development of the economy.

- Water management - The number of floods in the world increases dramatically. The government believes its traditional competitive advantage in fighting the sea, can be exploited further. An “Institution of Water

Management” is established and crown prince Willem Alexander of the Netherlands is the main ambassador of it.

- Green energy - Shell holds strong patents on hydrogen cell technology. The traditional energy sources are likely to deplete in the near future, and hence new and green sources of energy will be vital.
- Medical equipment for heart deceases - Hearth diseases are increasing dramatically. ASML and Philips Medical have already invested heavily in this sector. They have invented new scanning and “dotter”-technologies.

International leading pharmaceutical companies have invented new drugs. The academic hospitals in the Lowlands have been appointed high budgets for the application of the technologies in combination with the new drugs.

Although the economy is booming, the Lowlands face serious problems in their societies. The income inequality has increased tremendously. The reason is both evident and concerning. The new technologies and spin-offs in licensing and consulting only benefit the highly educated. The less educated have difficulties to cope with the changing economic dynamics, and consequently have missed the boat. The society resembles the free market American model with all its social challenges. The lower class regards society as unfair, but they have no choice than to develop themselves.

Ethnic groups have established political parties to support their communities. As a counter reaction of the upper class, new right winged political parties have emerged. Many rich are completely fed up with the fact that ‘their’ money is being spent on security and (ethnic) unemployment payments.

Religious fundamentalists have grouped to make a fist against the evil western society. Terrorist attacks on public transport have taken place and the AIVD has grown tremendously to enable infiltration.

The government identifies the need to focus on additional education, especially in the area of technology. A large portion of its funds are allocated to education. An additional annual export of 3 billion Euros of gas makes this investment in the future possible. Many youngsters take the education opportunities seriously and the Universities grow into globally recognized expert centers for technological developments in logistics, aerospace, water management, hydrogen cells and medical solutions.

### **Segregated but wealthy Lowlands (2018 – 2025)**

The economies in the Lowlands are flourishing. The technology companies are booming in the exploitation of their technological products. Consulting companies are also leveraging on the technologies and many consultants of the Lowlands are participating in major international projects on green energy, water management and logistics. The Lowlands have above average GDP growth in a flourishing world economy.

The social challenges are still increasing in the Lowlands. The additional funds for education of the less educated have not led to a significant improvement. The big4 cities segregate along ethnic lines; the autochthones account only for 20%. The crime rate is high. Upper class people move to wealthy villages, where they establish their 'own' society with high level entertaining facilities in new hip places. A separate Ministry of Security is established for the increasing crime in the cities and the ongoing threat of terrorism.

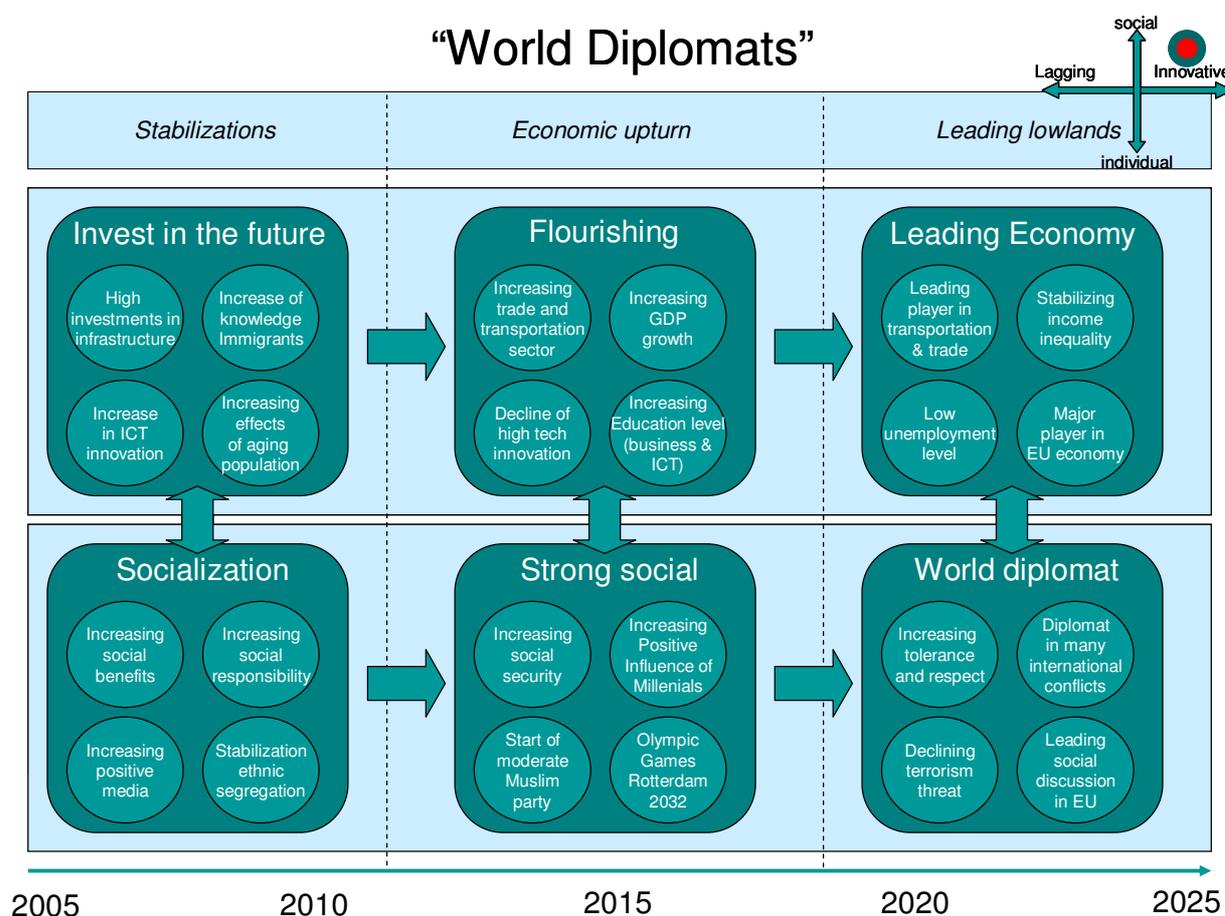
A main public debate is taking place on how to reduce the gap between the rich and the poor. The Ministry of Security is highly concerned about the media power. The media is abused as a communication medium of right winged elements to display unethical, sometimes even racist, messages. The Ministry has launched campaigns to convey the message that the new extreme right winged parties do not offer a solution for the disintegrated 2-class society.

The ageing population, at its peak as of 2020, has not become detrimental to economic growth. Utilization of private funds on security, education, healthcare and unemployment, has enabled the increased spending on social security. Older people with limited spending power are frequently taken care of by relatives. The few rich oldies can enjoy their old days in nice private institutions, where they have all kind of facilities and many nurses to take care of them.

### 3 Scenario “World Diplomats”

A graphic summary of this scenario is presented in section 3.1. A more detailed description of the scenario is included in section 3.2.

#### 3.1 Graphic summary “World Diplomats”



#### 3.2 Detailed description “World Diplomats”

##### Stabilizing (2005- 2012)

The government is investing in infrastructure, with the main goal to build on the long term strength of the Netherlands in the transportation and trade industry. For the short term the investments focuses on railroads, waterways, and roads. For the longer term the decision is made to build a new international cargo airport close to the Rotterdam port. The realization of this airport is expected by the 2016. The money for all these investments is partly provided by the income from the gas reserves. Also savings in

agriculture and culture provide the necessary funds for these infrastructure investments.

The unemployment level is declining. One of the reasons for this is a decrease in labor participation as a result of the aging population. To reverse this decrease in the labor participation, mainly participation of females and immigrants, social incentives like child care, tailor made training are put in place. The unemployment is also declining because of all the jobs that are created for the realization of all infrastructure projects, where part of these jobs are also taken by the non-western immigrants. The prospective of a strong international transportation hub has a positive effect on education and research. Mainly within ICT, business and banking the number of students increases. The industry works together to start a new logistics research institute. This institute attracts new start-up companies with a focus on ICT and logistics. Examples of research is a widely spread use of RFID and Vendor Managed Inventory. The growing knowledge position within transportation and trade helps attracting knowledge immigrants.

The living environment in the Lowlands is changing towards a more social environment. Part of this is the social benefits for increasing the labor participation. But also a change can be seen in the media, which have a more positive outlook on the living environment in the Lowlands and also on the global challenges. This positive media outlook is partly driven by the popularity of the lighthearted national scenario planning quiz on TV. This quiz creates awareness around social problems and also helps people to become more forward looking and opportunity spotting. Consequently the multicultural interest is increased and ethnic integration improves. On both the social and on the economical level, the Lowlands are becoming a more important player in the EU.

### **Economic upturn (2012 – 2018)**

The investments in infrastructure are showing results. First the investments in railway, waterway and road give an increase to the trade and transportation sector. The opening of the airport in 2016 results makes this sector grow even further. This growth has a

positive effect on the GDP growth in the lowlands. Also the growth in this sector shows a further decline of the unemployment rate. Overall this results in a stabilizing difference within income inequality. With the overall positive economy, the government doesn't put up economic trade barriers to protect the local market. The increase in the transportation and trade sector also help to cover the decline in income of the national gas reserves.

The investments in the knowledge economy have been minor successful. The percentage of technology students (except ICT) is still lower than the percentage in most neighbor countries. This is reflected in the innovation in the high tech industry, where the number of major innovation is slightly declining. The overall education level is increasing. This increase is mainly seen in the sectors ICT and business. The government also increases the money spend on security.

The level of social security is increasing in these years. This is possible because of a declining unemployment level. This social security is reflected by good unemployment benefits but also the social benefits put in place before for child support and tailor made training. The social security also takes care of the growing retired population. This is realized by the extra income from the growing trade and transportation sector.

The social environment shows a positive change which is due to the positive influence of the Millennials. This generation is grown up in a multicultural environment and their behavior results in higher ethnic integration. In 2013 a new moderate political party is started. The moderate view points of this party attract many Muslims voters and with the elections in 2014 this party immediately gains 20% of the votes. Also the moderate viewpoints help the acceptance of this party within the whole population. Also this has a positive effect on the ethnic integration. Another positive effect on ethnic integration is the decreasing unemployment among non-western immigrants which gives them the possibility to move out of their 'non-western' neighborhoods in the big four cities and integrate with the locals.

The positive changes in the Lowlands are also recognized on an international level. An important result of this is awarding the Olympic Summer Games of 2032 to Rotterdam which again gives an increase in infrastructure projects but also has a positive influence on tourism.

### **Important global player (2018-2025)**

All the investments in the trade and transportation sector really pay off and the Lowlands are a leading player in the world trade. The international cargo airport and the Rotterdam port play important roles in this position. This position also is a major impulse for the ICT (logistics) and the banking sector. Overall this result in a low unemployment figure (4.1%) and an average increase of GDP of 2.1 %. The strong economic position gives the government the ability to keep the social security system for the unemployed and retired populations in place.

With the low unemployment and a good social security system in place the income inequality in the Lowlands is still declining. This decline has a positive effect on crime rates, which are also declining. Together with the money invested in security also the terrorism threat in the Lowlands shows a serious decrease. This also strengthens the position of the Lowlands on both the EU and global level. The increasing ethnic integration and positive media trends now show of in an increase in tolerance and respect.

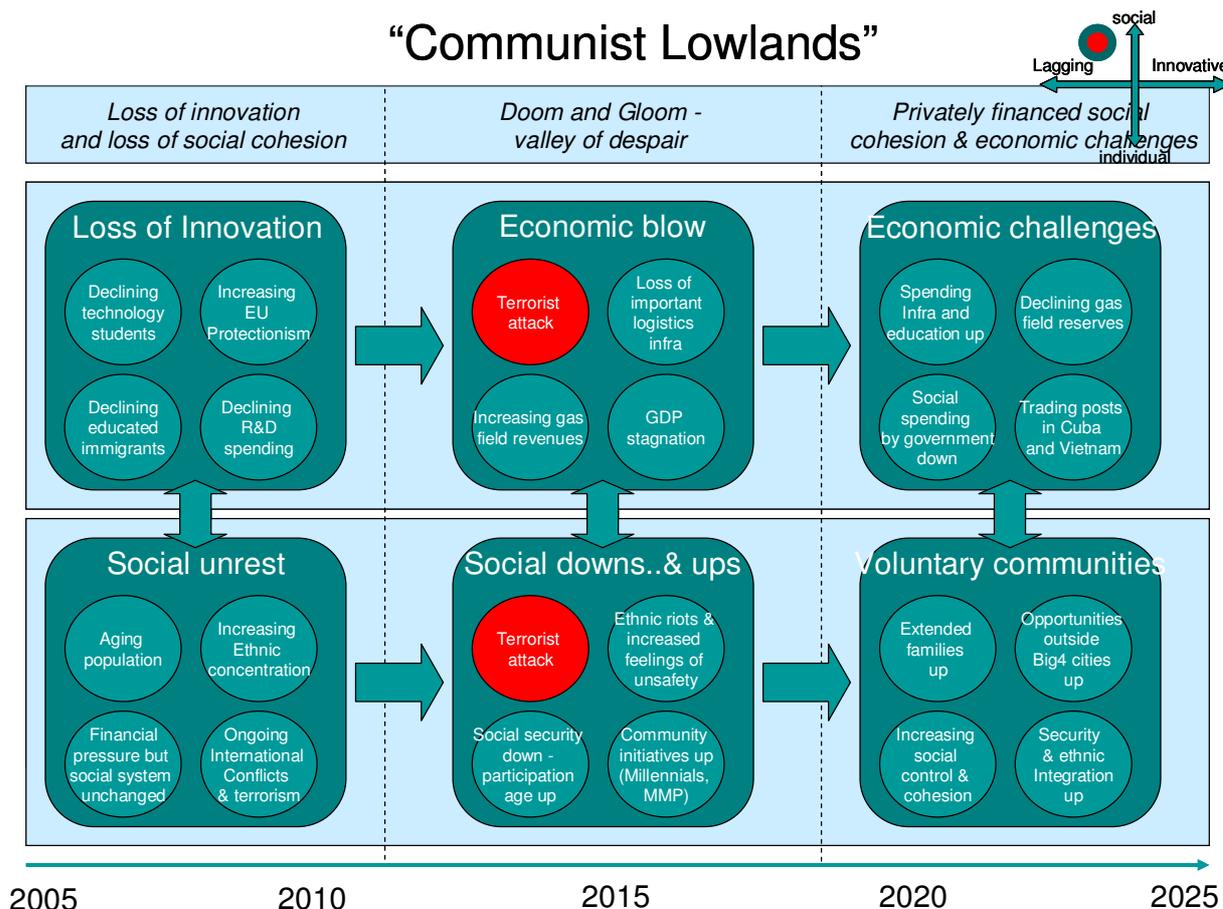
The flourishing economy also helps to get the Lowlands an important position within the EU. Within many aspects the Lowlands are able to use their vision in steering decisions, mainly the decision about social issues. This also helps with socialization of the EU. On a global level the social and economical position of the Lowlands is also recognized. The main result of this is that the diplomats of the Lowlands are called in the help solving major conflicts within the world. The international court in The Hague also plays an important role within this position of a world diplomat.

The preparations for the Olympic Games are started. The first plans for building new sport facilities are in place and also plans for new hotels and the Olympic Village are drawn by some major Dutch architects. The major logistic companies have signed up for sponsorships to help financing the Olympic Games.

## 4 Scenario “Communist Lowlands”

A graphic summary of this scenario is presented in section .1. A more detailed description of the scenario is included in section 4.2.

### 4.1 Graphic summary “Communist Lowlands”



### 4.2 Detailed description “Communist Lowlands”

#### Stagnating economy: 2005 – 2015:

The Lowlands increasingly suffer from international competition from low-cost countries, and become internally i.e. European mainly focussed. The export stagnates, and the government applies a restrictive trade policy on imports from specific non EU-countries. European economical cooperation, predominantly with the original EU members, becomes dominant., as the Lowlands are historically an appreciated EU

member. Whereas intra-EU trade remains stable, limited growth is realized outside the EU. The Asian economies continue to boom, and benefit greatly from Eastern European and Russian growth. As a result of the protective measures, lack of technical students and limited influx of a highly skilled techno workforce, technology innovations stall. Big multinational companies such as Philips consider moving out of the Lowlands. Productivity growth consequently declines from 1.9% pa to 1.2% pa. Intrinsic GDP growth is limited to c. 0.7% pa.

Migration is only allowed from the Central and Eastern European countries and from family reunions and marriages within the existing immigrant base (mainly Morocco & Turkey). Partially because of the restrictive migration policy, the overall population remains constant. The labour supply however starts to decline by 0.4% p.a. due to the ageing of the population. The existing social welfare system remains in tact because of strong labour market opposition. The government faces increased expenditure on pensions and publicly provided health care. Public spending as a % of GDP increases from 42% to 46%. To enable this spending, wage taxes are increased for both higher and lower incomes, which in turn further negatively impact the employment situation. The fear for inflation increases, which raises the risk premium on interest rates and it hampers investments. The overall social atmosphere becomes tense: higher income people consider migration, while lower class people perceive a deterioration of standard of living (despite the actual minor GDP growth per capital). New international conflicts against Muslim countries, specifically the invasion of Iraq by USA in 2003, result in a further increase of social tension. The first, second and new generation immigrants continue to settle mainly in segregated areas within the Big4 cities, increasing the immigrant ratio in these cities from 43% (2004) to almost 50% in 2015. Unemployment remains high at 8.5 % and reaches levels of 50 % amongst younger immigrants. Riots between immigrants and police occur more frequently in Big4 cities. Crime rates increase. The gap between rich and poor consequently increases.

### **Major terrorist attack: 2015**

Rotterdam harbour is hit by a massive terrorist attack in 2015 resulting in great social unrest, devastation and tremendous economical consequences. After some months of paralysis, emotional debates and riots in the Big4 cities, the government - short of funds - approves an accelerated exploitation of its gas fields to re-establish the infrastructure. Total costs are in excess of €10bn. As a consequence the depletion of the gas fields approaches rapidly: new research confirms that the majority of the fields, responsible for c. 3% of GDP, will be totally depleted by 2020 unless new gas sources are explored and exploited. This results in further unrest in society since some people fear the exploration of ecosensitive areas while others fear negative longer term economic developments.

### **In and out of the valley of despair: 2015 – 2025**

On the back of a general feeling of despair and fear for loss of wealth, newly elected politicians rise to the occasion and grasp the momentum for change. As a result they manage to change the existing welfare system and labour legislation. The pension age increases to 70 years, and participation of older people, women and immigrants increases mainly in service and healthcare related employment. The government shifts its focus from social welfare towards education. It fosters collaboration between private and public universities, and promotes the value of diversity and inclusion. Training in language skills and basic health care services are offered to low skilled people. Consequently, labour supply increases with 0.4 % - combined with a small productivity increase, this suffices to partly negate the negative impact from declining gas revenues in 2020.

The responsibility of the emerging income in-equality is shifted from 2015 onwards by the government to the private domain: voluntary communities emerge, firstly in the form of extended families (eg. children live under one roof with their parents and grandparents). The Millenium generation, a new group of youngsters in the age of 25 to 45 with a focus on the wider well being of society, are alerted by the increasing gap between rich and poor and start actively participating in these communities and thus manage to institutionalize voluntary communities. Their communication by means of

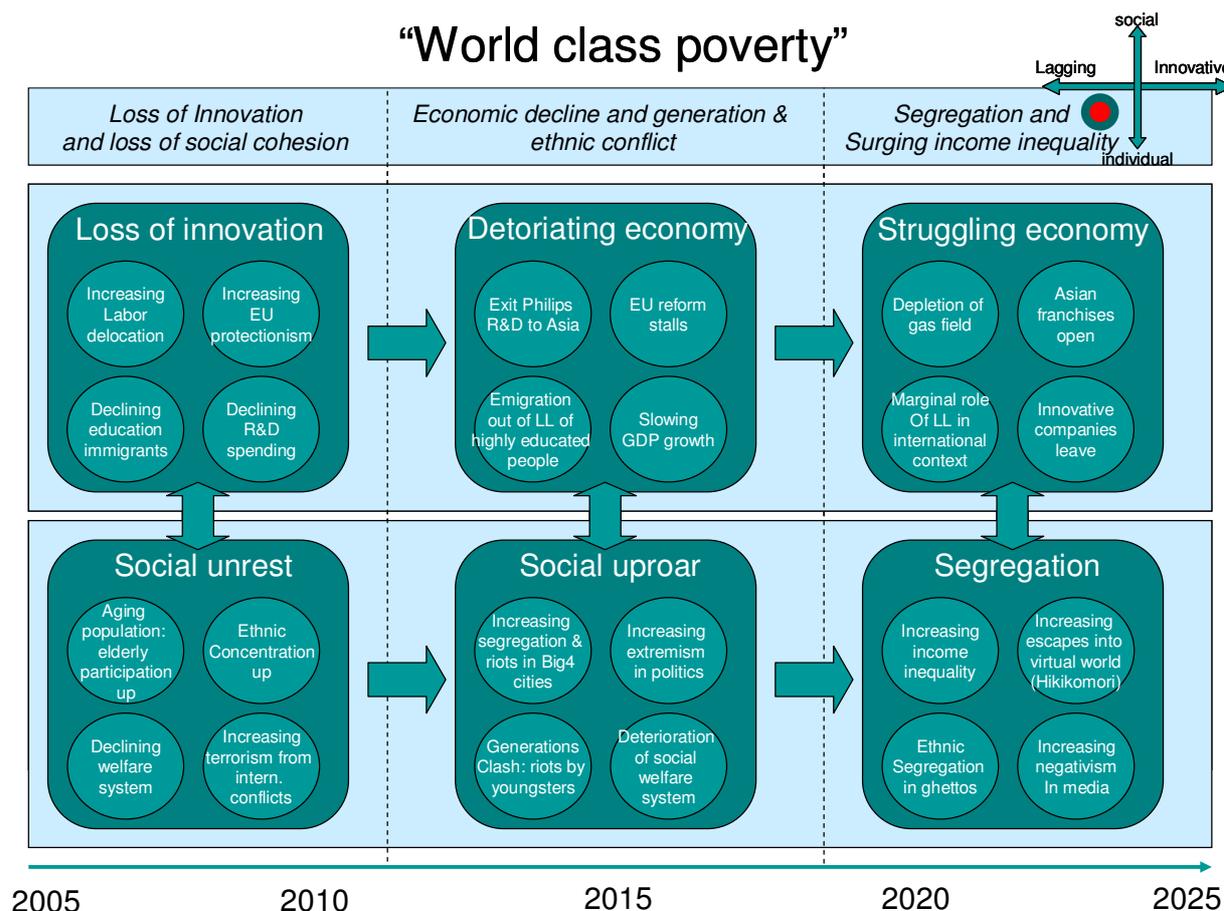
easily accessible web logs slowly start to result in improved feelings of (digital) connectivity. National awareness around the social difficulties spreads rapidly, and leads to a wider feeling of involvement, inclusion and positivism. The traditional media channels complement and trigger a genuine and constructive national and social consciousness based on trust and respect. A new moderate Muslim political party promotes and participates in the voluntary communities, which reduces ethnic distances. New legislation promotes immigrants to settle and concentrate outside the Big4 cities into local communities. Crime levels reduce owing to stronger social control, and terrorist breeding space is limited thru the inclusiveness.

With the institutionalization of the voluntary communities, which is further enhanced by the start-up of trading posts in Vietnam & Cuba (communist countries, with a strong tradition in - voluntary - community activities), GDP starts to recover moderately again at around 2025 thanks to improved productivity on the back of entrepreneurial local communities. Combined with a national feeling of social cohesion, there is a feeling of hope for future growth.

## 5 Scenario "World Class Poverty"

A graphic summary of this scenario is presented in section 5.1. A more detailed description of the scenario is included in section 5.2.

### 5.1 Graphic summary "World Class Poverty"



### 5.2 Detailed description "World Class Poverty"

#### Stagnating economy: 2005 – 2015:

The period between 2005 and 2010 is characterized by a stagnating GDP growth. Labour delocation increases caused by high labour cost. Approaching 2010 the EU cannot adequately cope with the Eastern enlargement and fails to reform her institutions. Rather than taking proactive measures, the EU becomes defensive and

tries to protect its growing trade deficits and unemployment thru trade barriers, and immigration barriers. As consequence of this and by more appealing areas in the world educated immigration slows. New R&D centres are predominantly founded in Asian countries, because they can offer well educated and highly motivated staff at competitive cost. Moreover the R&D is close(r) to the production centres. Consequently R&D activities in the Lowlands loose ground.

The aging population in the Lowlands starts to become a financial burden, and the government lacks leadership to drastically reform the social security system. Rather than pursuing a step change approach the government decides on minor incremental changes: minor increase of the pension age, and a marginal shift towards private funding of pensions. From 2010 onwards the government ramps up gas production to somewhat compensate for the extra social security expenditure. Unemployment rate stays stable but the participation rate decreases behind the aging population. The already low consumer confidence further deteriorates. On top social stability is being challenged by a growing ethnic concentration, especially in the big 4 cities. The stagnating economy forces the government to lower the social security standards towards 2015. This causes social unrest.

Also internationally the outlook is rather pessimistic; increasing terrorism and new international conflicts further lowers overall morale of the population.

**Conflict: 2015 – 2020:**

GDP growth struggles to stay positive around 2015. The percentage of people with highly skilled jobs drops in favour of lower skilled jobs. Shortly after 2015 larger innovative corporations as Philips move their R&D centres to India and China, who lead on research and production.

The consensus that is needed for European reforms in social matters, subsidies and tax harmonization cannot be reached. The European constitution is still not established, and Brussels continues to micro manage country laws and rules rather than taking a holistic and pragmatic view. Multilateral cooperation is virtually non-existing. Around 2015 the Asian countries, especially India and China, dominate the global economical and political arena.

Real-estate devaluation takes place in the Lowlands and severely increases the mortgages of the citizens.

Immigration lowers both by restrictive European measures and by the fact that other developed countries become more appealing for potential immigrants looking for a better life. The Lowlands now face the problem that their highly skilled workers increasingly emigrate to other parts of the world. The world is fragmented in a number of protected trade blocks, where Europe has fallen behind in GDP growth.

The increased segregation in the big 4 cities causes problems: increased criminality and even riots. Increased unemployment and further ethnic concentration lead to the foundation of extremist parties towards 2010. This includes an extremist Islamic party that represent the immigrants and an extreme right party to serve the disappointed and frustrated autochthones.

Shortly after 2015 a generation conflict takes place. The younger generations are so heavily burdened by the aging population that they take the country down, resulting in riots with the goal to drastically reform social security. The generation solidarity principle is changed. Mostly the poor, immigrant and elder people that don't have enough savings or personal pension plans suffer from these measures.

### **Segregation & surging income inequality: 2020 – 2025:**

The Lowlands are no longer leading innovators. GDP growth further suffers as a result of depleted gas fields. The Lowlands maintain their logistical hub function, and try to hold on to their strong trade reputation. Mac Peking and Star Asia start opening branches in the lowlands giving employment to low skilled workers. By 2025 the Lowlands and the rest of European are downgrading into a tier 2 continent. On an international the Lowlands have a marginal role. Innovative companies left the Lowlands and are active new in the new leading economic blocks.

As a consequence of the new social security system income inequality within the Lowlands soars. The Lowlands now have a small population of rich and a much more individualistic society. Technology in the form of weblogs enables a high degree of personalized and specialized content. Media is individualistic and focussed on the negative side of the news, hunting for sensation, emphasizing international conflicts

and terrorism. The rich live separated from the poor in secured communities. Cities are segregated along ethnic lines. A Japanese phenomenon of Hikikomori finds it way into the Lowlands. This phenomena is the name for younger people from the Millenians generation that cannot cope with the social pressure of modern society. They isolate themselves in their houses and from their parents, quit going to school and trade their life for a virtual one on the internet (surfing, chatting and playing games).