| Economic growth serving the good life

A Christian Democratic view of the Netherlands' earning potential

This is a joint publication of the Wilfried Martens Centre for European Studies and the CDA Research Institute. This publication receives funding from the European Parliament. The Wilfried Martens Centre for European Studies, the CDA Research Institute and the European Parliament assume no responsibility for facts or opinions expressed in this publication or any subsequent use of the information contained therein. Sole responsibility lies on the author of the publication. The processing of the publication was concluded in 2015.

CDA Research Institute
P.O. Box 30453, 2500 GL The Hague
The Netherlands
Telephone +31 (0)70 3424874
E-mail wi@cda.nl
Internet www.cda.nl/wi
Facebook www.facebook.com/wicda
ISBN/EAN 978-90-74493-918
The Hague, September 2015, Research Institute of the CDA.

All rights reserved. Nothing in this publication may be reproduced, published or made public, in any form or by any electronic or mechanical means, including information storage and retrieval systems, by photocopying, transmission or any other means without the prior written consent of the publisher.





Contents

Foreword Introduction				
	econ	omically active	X	
	1.1	Introduction	Х	
	1.2	Hope	Х	
	1.3	Ambition, service and vocation	Х	
	1.4	Creativity and craftsmanship	Х	
	1.5	Human shortcomings	Х	
	1.6	Rest	Х	
	1.7	Prospects for earning potential	Х	
	2	Innovation and co-creation: how economic activity leads		
		to economic development	X	
	2.1	Introduction	Х	
	2.2	Technical innovation	Х	
	2.3	Social innovation	Х	
	2.4	The importance of culture	Х	
	2.5	Institutional innovation	Х	
	2.6	Stability and adaptivity	Х	
	2.7	Prospects for earning potential	Х	
	3	Creative destruction: trends and developments which		
		affect the economy	X	
	3.1	Introduction	Х	
	3.2	Tectonic shifts	Х	
	3.3	Technological revolution as a game changer	Х	
	3.4	Impact of technological trends on economic results	Х	
	3.5	Impact of technological trends on the production process	Х	
	3.6	Growing scarcity of natural resources	Х	
	3.7	Prospects for earning potential	Х	
	4	Setting a strategy: opportunities and obstacles to the		
		Netherlands' earning potential	X	
	4.1	Introduction	Х	
	4.2	Knowledge, skills and ambition	Х	
	4.3	Education	Х	
	4.4	Labour market	Х	

4.5	Sustainability	х	
4.6	Housing market	х	
4.7	Government	х	
4.8	Financial sector	х	
4.9	Prospects for earning potential	x	
5	Policy recommendations: five guiding principles for		
	economic growth serving the good life	х	
5.1	Introduction	х	
5.2	Creative learning	Х	
5.3	Appreciative employment relationships	х	
5.4	Qualitative growth	х	
5.5	Entrepreneurial ecosystems	х	
5.6	Thinking long term	х	
Sum	mary and conclusions	x	
Bibliography			

Foreword

The financial and economic crisis has had a severe impact on the Dutch economy since 2008. The Dutch government had to pull out all the stops to be able to cope with the initial setbacks. Now that crisis management is gradually giving way to the cautious development of a long-term policy, the question that arises is: what the Netherlands' competitive position today? How will the Netherlands be earning its income in ten to fifteen years' time?

This question becomes all the more acute when we consider the many challenges facing the Netherlands in the years to come. In the first place, of course, there are the major global threats such as the looming energy, food and water shortages.

In addition, the global context is changing with numerous emerging economies which in many cases also live by different values than democratic ones. At the same time, this country's economy is to a large degree interdependent on that of other countries, both close by and further away.

Another challenge is taking into account the causes of the recent crisis when considering how to strengthen the Dutch economy. There are sufficient reasons to be able to attribute the financial and economic crisis suffered by this country and numerous other Western economies since 2008 to the uncoupling of economics and ethics. In undertaking this study the CDA Research Institute also expressly set itself the goal in the formulation of its vision for the earning potential of the Netherlands by bringing economics and ethics together again.

The starting point for our vision is that economics is about creating added value, a process that begins from a deeper human motivation and which is concerned with the future needs of others. Both aspects – human motivations and changing needs – have been somewhat neglected in both economic and public debate as well as policy in recent decades, and are therefore in urgent need of renewed attention. Ambition, serviceability and vocation are all factors which drive people to become economically active. Besides which, people want to do work which meets moral and ethical standards, as well as quality standards – there is a desire for craftsmanship. At the same time people need to be able to set their work aside on a regular basis, so that the rest that this provides enables them to use their free time for relaxation and reflection, and to meet other people.

This report therefore argues in favour of combining human development (enabling people to flourish) with economic growth (enabling the economy to

expand). It refutes the misconception that these two cannot go hand in hand. This study shows that economic growth and the good life are inseparably connected; that personal development (enabling people to thrive) is a necessary requirement for sustainable economic growth (a flourishing economy).

Because ultimately economic growth will continue be necessary to be able to meet people's many needs in the world. The suggestions made in this report therefore will always be linked to the aim of combining economic growth and the good life. And in this way an economy can again operate in the service of the good life.

The report was written by Paul Schenderling, MSc. The board is very grateful to him for the excellent and extensive work he undertook to bring this publication to fruition. He was supported in his work by a feedback group chaired by Prof. Dr. Roel Beetsma, which further comprised drs. Gerard Adelaar, drs. Henri Bontenbal, Prof. Dr. Lans Bovenberg, Guusje Dolsma, Prof. Dr. Raymond Gradus, Prof. Dr. ing. Teun Hardjono, mr. Wopke Hoekstra (advisor), Paul Koppert, Dr. Frank Kusse, drs. Agnes Mulder (advisor), drs. Lambert van Nistelrooij (advisor), Dr. Pieter Omtzigt (advisor), drs. Theo Schmitz, Dr. Arjen Siegmann, Prof. Dr. Lidewey van der Sluis, mr. Willem Stevens and drs. Jeroen van der Vlugt.

The author also spoke to numerous experts in the political and academic spheres. The board would like to thank the members of the feedback group, the other experts and everyone concerned who was willing to help the Research Institute in the preparation of this report.

This study was conducted as a joint project with the Wilfried Martens Centre for European Studies, the political think-tank of the European People's Party (EPP) in Brussels. The board of the Research Institute would like to thank the Martens Centre for its support; the Research Centre takes sole responsibility for the contents of the report.

Drs. Theo Bovens Drs. Rien Fraanje

Chairman Deputy Director CDA Research Institute

Introduction

What is the connection between Rembrandt and the electronic chip machine manufacturer ASML?

An intriguing question which many people would probably not be able to easily answer. Actually, there is a very clear, albeit surprising connection, and that is: lithography. The technique of etching - an originally 15th century technique - in which an image could be made by engraving on copper or zinc plates - was perfected in the Netherlands the 16th and 17th centuries. This art form then began to flourish and the Netherlands produced one of the greatest (if not *the* greatest) etchers in history: Rembrandt. In the 18th century and later the technique was further refined to become lithography, in which patterns were applied using stone and later aluminium and plastic plates. In the 20th century it turned out that techniques derived from lithography could be used in machines to apply patterns to electronic chips. Today the Dutch company ASML is the world's biggest manufacturer of machines for the production of integrated circuits (ICS) or chips. A remarkable story which – as this report will show – says a great deal about earning potential in general and the Netherlands' earning potential in particular.

When someone has the capacity to make something of value, and the opportunity to apply this capacity, then they can grow and flourish. Anyone who has experienced this, understands that economic opportunities are the key to the future of a country. In recent years this awareness has been painfully underlined in the Netherlands and other Western countries further to the worst economic crisis since the Great Depression of the 1930s. Unemployment robs people of the opportunity to fully develop themselves. Various economic indicators are now cautiously pointing in the right direction, but people still perceive a high degree of economic uncertainty. This is no accident. In recent years – in the midst of the crisis turmoil, almost imperceptibly – important shifts have occurred which will have a major impact on the Netherlands' economic opportunities in the future. It is therefore urgent that an in-depth and up-to-date study be carried out on the Netherlands' earning potential together with an exploration of the policy options that will help to strengthen that earning potential.

An overview of the Netherlands' earning potential

From a historical point of view the Netherlands' earning potential has witnessed extremes: the Netherlands has been described as the first modern economy in the world and in the 17th century – the Golden Age – saw an exceptionally high level of wealth creation. In the 18th and 19th centuries the wealth creation in the Netherlands started to lag behind that of other countries. Following the Second World War the Netherlands experienced a period of steady high growth in prosperity. Due, among other things, to strong institutions, a well educated

population, technical ingenuity and an international outlook which enabled this country to deliver considerable added value, both at home and abroad.

Over the last 10 to 15 years, we have again seen extremes in the Dutch earning potential, but now at a much more rapid rate. The contrast between both extremes is striking, in both absolute and relative terms. In the period before 2008 the Netherlands was among the best performing economies in the world – in terms of both economic growth and labour productivity, as well as employment. This picture has reversed since 2008: the Dutch economy has suffered lasting damage as a result of the crisis¹ which has led to a gap in terms of productivity growth compared with the best performing economies in the world². The question is whether the Netherlands can again catch up with the frontrunners and what implications this has for the more general future prospects for the Netherlands.

Old and new policy prescriptions

In dealing with the questions facing the Netherlands today it is tempting to revert to tried and tested past policy interventions, for example, to encourage labour participation, a policy line which has repeatedly been pursued over the last twenty years. One of the main conclusions of this report is that reverting to past policies will not be sufficient for the Netherlands' future earning potential. The thesis of this report is that different policies will be needed, policies rooted in a different view of the economy. The starting point for our vision is that the economy is about creating added value, a process that begins from a deeper human motivation and which is concerned with the future needs of others. Both aspects – human motivations and changing needs – have been somewhat neglected in both economic policy and public debate over the last few decades, and are therefore in urgent need of renewed attention.

Human motivators

The concept of earning potential implies the ability and willingness to contribute to a collective result. The emphasis in both economics and policy is on capacity, a tendency which, among other things, is expressed in the excessive focus on capital (and human capital): talent, knowledge, skills and production means. For the structure of an economy, however, it is as least as important that there is appropriate work for everyone and that people are capable of acting on the basis of their own motivations. It is therefore by no means self-evident that the presence of knowledge and skills in combination with economic dynamism will lead to a happy and prosperous society. On the contrary, there are indications that the people of the Netherlands want an economy in which prosperity and well-being are more closely linked.

^{1 |} Ball (2014).

^{2 |} CPB (2014a).

One of the most surprising conclusions of the recent study by the Scientific Council for Government Policy (WRR) on innovative ability is that the Netherlands may well have great innovation potential, but the willingness to seize opportunities and the ambition to market these on a large scale is much less in the Netherlands than in other countries. The mental pressure on people to perform has also greatly increased, both on the labour market and elsewhere. Those in work find it difficult to combine the demands of their work and private life. In addition, the dominance of economic thinking in private and public organizations and the political discourse has led to a glaring lack of mission and vision, as a result of which people feel alienated in both their professional work and their voluntary work. Added to this, the economic concepts of working longer hours, flexibility, economic stimuli – may be at odds with deeply held notions about the good life that people hanker for – rest, connectedness and unconditionality.

In short, it is vital to realize that economics is a form of service and that the most important question in an economy is⁶: how can I be of service (or, how can I help you)? This question is relevant not only in strengthening the link between prosperity and well-being, but also in creating economic opportunities. The key principle in Christian Democratic thinking is that the economy is a social activity which forms part of an attempt to shape the good life.⁷ Economics is therefore not neutral ground. People's everyday work provides the building blocks for their highest ideals but also confronts them with the hardest edges of reality.

Alfred Marshall (1842-1924), a pioneer in the study of economics wrote⁸: 'Man's character has been moulded by his every-day work...; the two great forming agencies of the world's history have been the religious and the economic.'

Changing needs

Apart from a consideration of human motivations, global trends and developments also need to be taken into account. The current global developments differ in fundamental ways from the global situation in previous decades. The competition has become much more intense since the awakening of economic

- 3 | WRR (2008), p. 82.
- 4 | SCP (2004).
- 5 | SCP (2010).
- 6 The German word for economy best expresses the multiplicity of this notion: 'Wirt-schaft' refers to value, 'Wirt' (worth), in which an income is earned (by the innkeeper) by providing the best possible service (to his or her guests).
- 7 | Economic historian Keith Roberts underlines this point with the following historic illustration: 'Prehistoric economic transactions were indistinguishable from social, religious and political relationships. People had little material wealth or desire for gain, and their sense of time made calculation difficult. The search for profits became conceivable only when these conditions began to change, with the birth of the first cities.'
- 8 | Marshall (1997), Book I, Chapter I, § 2.

giants such as China and other emerging economies. Technological developments follow one another at a rapidly increasing rate, making it ever more difficult to adapt to the new economic environment.

Over the coming decades natural resources will gradually start to become more scarce, which will require far-reaching changes to our production systems. There are also several internal factors that are preventing further growth in prosperity. For example, the Netherlands is faced with the task of reducing public and private debt in the coming years, following which an even greater challenge awaits it in the form of an ageing population.

Over the past 10 to 15 years policy has been focused mainly on increase labour participation, balancing the public finances and introducing reforms on the supply side of the economy, particularly in the areas of labour and social security. The top sector policy has also helped to reinforce the Netherlands' economic structure. These have all been useful measures. But given the global changes just referred to, for the future it is essential that the focus of our policy efforts shifts towards increased productivity, as well as devising and implementing creative answers to the challenges facing the world. We need to ask ourselves once again at a higher level of abstraction: 'how can the people of the Netherlands once more be of service to one another and to the world?'

Study questions

The main question of this study is: which principles, insights and policy decisions will help to establish a strong Dutch economy that exists to serve the good life? The main question, naturally, breaks down into a number of related questions, such as: what drives people to be active in life (economically and otherwise)? How does economic development come about and what is necessary to achieve the best results? What changes are taking place in society and in the world and where will the future needs lie? What impact are worldwide trends and developments expected to have on the economic structure of the Netherlands and what obstacles and opportunities do these present? What strategy and associated policy measures will enable the Netherlands to make the best possible use of its economic potential?

Scope

The scope of this study is, of course, limited. The predominant outlook of this study is the institutional outlook, at the meso-level between micro and macroeconomics. This means that the scope of the study has been limited to the medium term, i.e. the period until 2025. This also means that the short-term recovery of the Dutch economy has been left aside and global economic developments have been deemed to be beyond the influence of the Netherlands. Further, the academic study of economics itself, and the changes that may or

may not need to take place in economic thinking, also lie beyond the scope of this study.

About this report

This report describes the earning potential of the Netherlands, taking Christian Democratic principles and recent scientific insights as far as possible into account in the context of the broader social setting in which the economy is embedded. The report has been organized as follows. The first chapter describes what motivates people to become economically active. The second chapter considers the way in which economic activity leads to economic development and what recent economic insights have to say about this. The third chapter is devoted to worldwide trends and developments, following which chapter 4 looks at the impact of these developments on the Netherlands' earning potential. The fifth chapter provides some policy recommendations. A report which focuses on innovation cannot fail to include some sort of graphic design innovation. To clarify the arguments we have included text boxes that provide visual support for the main theme. We hope that this makes the report easier to read while and help to facilitate the application of the insights it provides.

1 | Creation and recreation: the reasons why people become economically active

Motto

'Sei mit Lust bei den Geschäften am Tage, aber mache nur solche, daß wir in der Nacht ruhig schlafen können.'

Thomas Mann⁹

9 | Mann (1997).

1.1 Introduction

Economic development is an incredible phenomenon. Various countries have seen a period of development which the rest of the world has dubbed an 'economic miracle'. The German economic success since the Second World War is referred to as the 'Wirtschaftswunder'. In France the fruitful period between 1945 and 1975 is known as the 'Trente Glorieuses'. The growth spurt made by the South Korean economy in the period 1961 to 1996 was dubbed 'Hangangui Gijeok', or 'the miracle on the Han river'. And the strong revival in the Dutch economy during the 1980s when Ruud Lubbers was Prime Minister, was referred to abroad as 'the Dutch miracle'.

There are countless possible explanations for economic development, explanations which, piece by piece, constitute and enormous jigsaw puzzle. Adam Smith (1723-1790), one of the founding fathers of economic science, for example, referred to the fruits of thrift and specialization¹⁰, while David Ricardo (1772-1823) focused on the mutual benefits of international trade¹¹, Alfred Marshall (1842-1924) discovered the economic impact of economies of scale and the benefits of agglomeration¹², and Robert Solow (1924-present) emphasized the role played by technological advances in increasing prosperity¹³.

The question which comes to mind is what connects these various, each in their own right, impressive explanations with one another? In her book 'Economic philosophy: An essay on the progress of economic thought' (1962) the British economist Joan Robinson gave us a useful clue. She wrote ¹⁴: 'The formula seems to suggest that the rate of growth of economy is determined by technical conditions... and the propensity of the population to save. This leaves the most important element out of the whole affair: the [human] decisions governing the rate of accumulation of capital [in the economy]....There is a strong connection between the drive to accumulate and the drive to increase productivity. Human nature is therefore the true source of economic growth.'

Robinson's call to view economic development on the basis of the human dimension and human nature was widely adopted in the field and resulted in the necessary breakthroughs in the field. The rise of behavioural economics, is just one example¹⁵. The same call is being made from the Christian Democratic tradition. The fundamental principle of Christian Democratic thinking is essentially its ideas about human nature and human dignity, and its aim that people should have the opportunity to fully develop themselves¹⁶.

^{10 |} Smith (2003).

^{11 |} Ricardo (1821).

^{12 |} Marshall (1997).

^{13 |} Solow (1956).

^{14 |} Robinson (1962), chapter 5, II.

^{15 |} Behavioural economics is concerned with research into human judgement and the choices that people make.

^{16 |} Schenderling (2010), chapter 3.

Christian Democrats believe that a just society can be brought about by taking a realistic view of human nature in the organization of society rather than basing it on any blueprints for an ideal society¹⁷.

In the first chapter of this study we will therefore be examining the following main question: what motivates people? How can people thrive? And how do human decisions lead to economic development? As the progression of the questions suggests, these are not purely economic questions, but, as will become clear later in this chapter, they are questions which clearly have an economic aspect. Or, expressed in terms of the Christian Democratic thinker Herman Dooyeweerd¹⁸, human activity is a singular thing made up of various aspects in which the economic aspect is just one. Each of the aspects of human activity has its own discourse which then enriches all other discourses, to create a rich and varied pattern of ideas¹⁹. From the Christian Democratic perspective we should never consider a person or describe people as one-dimensional beings, for example, as an economic entity or simply as a someone striving to be happy²⁰.

Essentially, by considering the question of human motivation and its economic aspects as a whole, we can develop a view of the economy which provides scope for the splendour and diversity of the human existence. This brings us in a natural and scientifically sound manner to the main conclusion of this chapter, which also forms the central theme of this entire study, i.e. the realization that economic prosperity and the good life go hand in hand and, indeed, need one another.

The central theme of a Christian Democratic vision of the economy is the realization that economic prosperity and the good life go hand in hand.

From a political viewpoint, giving proper consideration to the connection between human development and economic growth is both relevant and highly topical. A recent publication by the Netherlands Institute for Social Research (SCP), for example, 'De sociale staat van Nederland' [The social context of the Netherlands today] shows that people increasingly think that instead of being played out against one another, the material and immaterial aspects of their

^{17 |} Willetts (2003), pp. 83-99.

^{18 |} Dooyeweerd (1969), Part II, Book 1, chapter 2.

¹⁹ For an interesting analysis of Dooyeweerd's theory of aspects in relation to the economy, see the article (in Dutch): Hengstmengel (2001).

^{20 |} Based on its view of human nature, Christian Democracy has made an unequivocal contribution to this debate. The article by Govert Buijs, for example 'Wie markt zegt, moet ook moraal zeggen' (in Dutch) [When you say economics you must also say ethics].

lives – prosperity and well-being – should be brought together instead²¹. The consequences of this is that policy-makers are, or indeed should be, increasingly moving towards policy measures to strengthen the balance between our prosperity and welfare²². The SCP has therefore included both aspects in a wider definition of quality of life.

By investigating the relationship between economic growth and the good life at the start of this study, later we will be able to identify policy areas which will be good for the individual as a whole, in all his or her facets. This will give people confidence that a Christian Democratic view of the earning potential of the Netherlands offers a vision which will ultimately serve them the best. While remaining cognizant of Dooyeweerd's principle that we should never ignore reality – throughout this report our aim has been to focus on the individual and consider people's economic activity in the light of various aspects or points of view.

Therefore we have included several text boxes in this report to support and clarify the main content, such as the following.

The organization of the economy should be concerned with the question of how we can enhance our welfare and prosperity in a balanced manner and the policy measures which will benefit the entire individual in all his or her facets. This key theme has been applied throughout this study by reiterating the question:

How does this aspect relate to economic growth and the good life?

Finally, it is important to note that it is not possible to define a complete vision for the economy based on only the micro-perspective – at the level of the individual. Humans are social beings and the interaction between people in communities creates its own dynamic with differing results²³. It is therefore vital that our vision of human growth and development and the role played by the economy in that be supplemented by asking the same questions from the macro-perspective, in the context of communities. This will be the topic of the next chapter.

^{21 |} SCP (2013), pp. 13-17.

^{22 |} See, for example, the Coalition Agreement 'Bruggen slaan' (Building Bridges) of the Rutte-Asscher government, which talks about policy priorities on which 'our welfare and prosperity' collectively rest.

^{23 |} Niebuhr (2005), chapter 2.

1.2 Hope

We begin the quest for human motivators and what enables people to thrive by being as specific as we can. We will do this by looking at people's direct needs; those which prompt people to take action. To start with, we encounter a basic set of needs which the economist previously mentioned, Alfred Marshall, referred to as the 'standard of comfort'²⁴. These are people's immediate needs in terms of food, clothing, housing, safety, and, by extension, their wider material needs to live a comfortable life.

As the word 'standard' already implies, people's material needs are not fixed: people get used to a certain level of comfort, and our expectations change on the basis of the latest standards of comfort which we have collectively achieved. Interestingly and tellingly in this context, the definition provided by Adam Smith talks about an adequate standard of living, i.e. 'to be able to appear in public without shame'. Wealth and poverty are therefore not purely material concepts, but social ones. A few centuries ago people were ashamed if they could not feed their children, in later ages people were ashamed if they could not send their children to school, while today people are ashamed if they cannot provide their children with a smartphone. In the Netherlands today there are still many families who find it difficult to put food on the table on a daily basis, for example.

Being able to fulfil one's immediate human needs or not also has more that just material or social consequences: it seems that lack and scarcity have a deep impact on our thinking²⁵. Scarcity makes the mind sharp and creates a better focus and better short-term decisions with regard to scarce goods. The adverse effect, however, is that scarcity narrows the mind, such that the mental ability to take long term decisions is reduced. This can lead to a vicious circle: scarcity which leads to further scarcity. Therefore, it is important that people's immediate needs are fulfilled in the material sense, but also for their further development.

How does the aspect of needs relate to economic growth and the good life?

Providing for people's basic needs is a necessary condition for their further development.

People work hard to be able to live a comfortable life. Anyone who at some time has lost their job or experienced a period of financial worry or insufficiency,

^{24 |} Marshall (1997), Book VI, chapter 13.

^{25 |} Mullainathan & Shaffir (2014).

will know that work is a dire necessity. Given the constantly rising standards of comfort that people have achieved, this then raises the question of: why do people continue to work hard, when they have already attained a high degree of comfort and can maintain that with relatively little effort? This is a question which has occupied people for centuries but which can only be answered in steps²⁶.

The vital step towards an answer can be summarized by the word: hope. Humankind is able to make future projections and work towards them in life in both a literal and a figurative sense. In fact, there is no way that people can live other than on the basis of hope: it is both a human gift and a human challenge. The gift aspect is found in numerous sources, for example, the story of Prometheus in Greek mythology (see textbox below). The challenge aspect is Biblically inspired and plays an important part in the Christian Democratic tradition^{27:} "We aim to build a society in which we understand the responsibility we have towards God to maintain His creation, a society in which people hold one another accountable. Our call to today's society is that we should give priority to this responsibility, even if that means putting a brake on the further augmentation of our material well-being. We make this appeal, because we know that 'man does not live by bread alone'."

Human aspiration in Greek mythology

The myth of Prometheus was recorded by the Greek poet Hesiod^{28.} Hesiod states that Prometheus symbolizes the struggle of mankind. Prometheus and his brother Epimetheus were both Titans (minor gods) and had been instructed by Zeus to create humankind. However, because humanity was so troubled, Prometheus fetched the eternal fire from Olympus in a torch and gave it to humanity. Zeus was enraged by this treachery. Because of this action, Prometheus, whose name literally means 'thinking ahead', is considered to represent human ingenuity. In revenge for the Prometheus's arrogance, Zeus withholds from humanity the means to live. Had Prometheus not provoked Zeus's wrath, according to Hesiod, people would easily do enough work in

^{26 |} A recent often cited publication by Robert and Edward Skidelsky shows just how thorny this issue is. In their book 'How much is enough?' they ask somewhat despairingly why the prediction of their great inspiration John Maynard Keynes made in 1930 – that further to a huge increase in prosperity in a 100 years' time people would only have to work 15 hours a week and would mainly be enjoying their free time – has not turned out to be correct. After all, since 1930 Western Europe has become almost five times as rich and we are still working more than 35 hours a week on average (source: CBS). What hidden human need or needs can explain this mystery?

^{27 |} The quotation is taken from the first manifesto of the CDA, entitled 'Not by bread alone' (1977-1981).

^{28 | |} Source: Hesiod, 'Works and days'. Hesiod lived in the mid-8th century B.C.

a day to harvest enough for a year. Following which Zeus sent Prometheus, the first woman, Pandora. Pandora was fashioned from clay by Hephaestus and gifted by the gods with intelligence, talent, beauty and curiosity. Pandora received a jar from Zeus containing all the evils of mankind. Prometheus was suspicious of such a gift from Zeus and politely refused to marry Pandora. Prometheus's stupid brother, Epimetheus, who only thinks later, however, did not listen to his brother's warnings and accepted Pandora as his wife. Pandora, of course, cannot contain her curiosity and opens the jar thereby spreading all the evils on earth: death, disease and pain. Pandora tries to shut the lid of the jar as quickly as possible but is too late, leaving only hope behind. Which is why when people are afflicted by the worst disasters on earth, it is only hope that remains. And thus Aeschylus would write later that it was because of the actions of Prometheus that blind hope lives in people's hearts. A hope that also ensures that despite every setback, humanity works hard and puts its ingenuity to good use to improve its existence.

We only realize just how essential hope is for people to act if we try to imagine a situation in which there is almost no hope. We can find a contemporary example of this in the study of the young French economist Esther Duflo^{29.} In an Indian province she asked the parliament to lay down by law that in a number of randomly chosen villages from now on only women could be elected as mayor. The politicians concerned were perplexed but agreed to do so. Some years later Duflo took a random sample of the villages. The result? In those villages with a woman mayor it appeared that the number of girls attending school had significantly risen, along with the average family income. Clearly parents considered the measure to be so hopeful that they started to work harder to enable their daughters also to go to school.

How does the aspect of hope relate to economic growth and the good

Hope gets people moving and is therefore vital to human development.

Let us try to provide a tangible example of the foregoing: what hopes do people cherish and how are these reflected in their day-to-day activities? Human aspirations can seldom be put down to just one goal. There are generally various goals which become knit together in such a way that it is only with difficulty that people can separate them themselves. People also often act on

^{29 |} Duflo & Chattopadhyay (2001).

the basis of a sense of impulse and only realize later what the results of their efforts have been^{30.} In general terms there are three primary motivations for human action, and these are: personal ambition, contributing to the welfare of others, and vocation. Martin Luther King referred to these three primary motivators as the 'three dimensions of a fulfilled life'. People flourish and grow when each of these dimensions is present, and can enhance one another. We will consider these dimensions in more depth in the next section.

1.3 Ambition, service and vocation

The first dimension in this picture of human nature, personal ambition, is made up of various aspects. On the one hand, there is the need to build up an independent existence. People are proud to earn their own money and can create a home, a private domain which we can arrange in accordance with our own tastes. In this context Aristoteles spoke of a longing for self-sufficiency, the Austrian economist Joseph Schumpeter spoke of the 'will to found a private kingdom'. The civic ideal is based on this: to work hard, create and maintain a family, and enjoy the fruits of your labours.

On the other hand, there is the need to develop your personal capacities, to show what you are capable of. Everyone has talents which he or she can develop. This is about developing self-respect in a literal sense: learning to appreciate your own contribution to the world around you^{31.} We could therefore describe self-respect or self-esteem as something positive: given that self-love is the undeniable basis to be able to love others^{32.}

In economic terms, both these aspects of personal ambition exhibit the general and economic benefit of ownership: when people see the results of their work, can influence the results and enjoy the fruits of it, then people are willing to take responsibility for it and to pay attention to the results of their work. Ambition, responsibility and care therefore constitute the foundations of a flourishing and resilient society.

How does the aspect of ambition relate to economic growth and the good life?

Ambition and ownership motivate people to create a life and to take of it.

^{30 |} John Maynard Keynes said about this: 'It is a characteristic of human nature that a large proportion of our positive activities depend on spontaneous optimism rather than on mathematical expectations.' Source: Keynes (1936), pp. 161-162.

^{31 |} CDA Research Institute (2006), p. 69.

^{32 |} Cf. the greatest Commandment: 'Love your neighbour as yourself'.

This brings us to the second dimension in the picture of human nature: people have the need to contribute to the welfare of others. This need is deeply-rooted in human nature and is directly connected with our emotions: empathy enables us to put ourselves in someone else's shoes and appreciate their thoughts and feelings. In this way people like to work together and share their triumphs and tribulations. Our social antennae also enable us to understand the needs of others and provides a stimulus to meet those needs³³. This applies in the more intimate context – meeting the specific needs and wishes of those surrounding us – but also in a wider context. On the basis of our rational capacity, supported by our conscience and tradition, people develop a notion of what 'the greater good' is: the bonum commune, i.e. the common good or general welfare of people³⁴.

The people's awareness of the general good creates a wider view that leads us to act in matters which lie outside our own direct interest and are more abstract than our immediate environment. This awareness of the greater good has been splendidly expressed and cultivated in Catholic social teaching and over the last couple of centuries has led to the development of many useful public and private facilities and services, such as businesses, hospitals, schools and universities, as well as cultural institutions.

How does the aspect of service relate to economic growth and the good life?

Empathy and awareness of the greater good motivate people to contribute to which lie beyond our immediate interests.

The third dimension of human activity is the spiritual dimension. The life story of St. Augustin (354-430) provides a good example. Augustine was born with a silver spoon in his mouth: he came from a well-to-do family and had received a good education, he had held senior positions in the power centre of the world – Rome – and enjoyed a hedonistic lifestyle with plenty of parties while surrounded by beautiful women. But nevertheless he felt that something was missing. His heart remained restless, as he indicated himself³⁵·Augustine went in search of his vocation, which he ultimately found in serving God and the religious community and the community as a whole.

The quest for a personal vocation has existed since time immemorial. We are part of an infinite universe which we can never fully comprehend^{36.} People will therefore always ask why, and ask about the origins and the meaning of life, as well as his or her place in it. Apart from this contemplative aspect, our

^{33 |} Smith (2009), Book III, chapters 1-6.

^{34 |} Leo XIII (1891).

^{35 |} For a description of this see the 'Confessions' of St. Augustine.

^{36 |} Niebuhr (1996), chapter 2.

vocation also has practical implications, as expressed by the Russian writer Tolstoy in one of his short stories^{37:} 'It is not given to man to know his own needs'. Humankind is too elevated to be able to live fully in the present and at the same time too limited to create an ideal society here on earth. Therefore people will have to remain alert every day in constantly changing times and circumstances to decide on what is right and how to act accordingly.

How can we find our calling or vocation? People have a double hurdle to take to find their calling: the first is a leap of faith, the second hurdle is that in the community. With regard to the first hurdle: given that our vocation always lies outside of ourselves and is surrounded in mystery, it is necessary to make assumptions and build on them. Philosophical traditions play an important part in this. In terms of the second hurdle: we can discover where our vocation lies and find out how we can express that calling in our age by asking one another and learning from one another.

Although at first sight vocation and economics would appear to be two entirely different things, our daily lives constitute the intersection where they meet. Every day we make decisions about what we will and won't do, what we will give our attention to and what we will ignore. How people act – also in the economic context – therefore always has an ethical dimension. Dooyeweerd observed that our vocation makes us aware that not all needs are noble enough for us to be willing to sacrifice our resources to them³⁸. In other words, we can only describe an action as economic if we have been careful not only in the use of resources but also selected our goals carefully.

The reverse also applies; we can only act ethically if we are aware of scarcity and lack. Reasoning on the basis of their vocation, many people recognize this intuitive thought. For example, it appears that substantial numbers of consumers are willing to pay more for a product with a smaller ecological footprint. People also apply this thinking in their work. Alfred Marshall wrote about this^{39:} 'Everyone who is worth anything carries his higher nature with him into business; and, there as elsewhere, he is influenced by his personal affections, by his conceptions of duty and his reverence for high ideals.'

How does the aspect of vocation relate to economic growth and the good life?

People are searching for their vocation and express their vocation in their daily work.

^{37 |} Tolstoy (2008).

^{38 |} Hengstmengel (2001).

^{39 |} Marshall (1997), book VI, chapter 1, § 1. Once the 'standard of comfort' as refered to above has been met, Marshall believed that people should strive towards a 'standard of life' which incorporates a higher calling.

1.4 Creativity and craftsmanship

Ambition, service and vocation are what motivate people to work. As Marshall indicated, there is a strong connection between the things that motivate people and their daily work. We see this, for example, reflected in the contemporary word 'professional' which essentially means: someone who declares that they believe in something⁴⁰. The original meaning of the word profession was to swear (profess) a religious oath. For a long time – from the classical period until the end of the Middle Ages – the association with this was that reflection and other spiritual activity was something of value while work held less worth⁴¹. After the Reformation a more positive value was attached to work. Maarten Luther, for example, put forward that everyone – rich or poor, well educated or less well educated – must work, and that people could serve God and their fellow human beings through their work⁴².

The dignity of work and the work ethic that this gave rise to, has various implications in relation to people's economic activities. Given that people derive identity from their work, it is important that people have the opportunity to do meaningful work. This has not only a quantitative element – providing for enough jobs – but also a qualitative one – ensuring that people do not become alienated from the higher purpose of their work.

People have a need for a professional ethic: work that meets certain ethical and quality standards. Where this is so, people take pride in their profession, which increases their dedication to their work. Companies in their policies, for example, are increasingly focusing attention on sustainability and social goals, because this more easily helps them to attract and motivate personnel⁴³.

Professional ethics also bring responsibilities. In a recently published Apostolic Exhortation Pope Francis expressed it thus^{44:} 'Business is a vocation, and a noble vocation, provided that those engaged in it see themselves challenged by a greater meaning in life; this will enable them truly to serve the common good by striving to increase the goods of this world and to make them more accessible to all.'

^{40 |} Schwartz & Sharpe (2010).

^{41 |} Benschop (1995).

⁴² Quote: 'Ist nicht ein trefflicher Ruhm, das zu wissen und sagen, wenn du dein tägliche Hausarbeit tuest, das besser ist denn aller Mönche Heiligkeit und strenges leben?' Source: 'Der Große Katechismus', 1529. John Calvin made the following comparison: 'The lives of the pious are rightly compared with trade because they both enter into alliances for the benefit of the common good. Source: 'Institutes', 1536.

^{43 |} Auger et al. (2013).

⁴⁴ Franciscus (2013). See also the recent publication of the CDA Research Institute 'Duurzaam ondernemen als roeping' [Corporate social responsibility as a vocation] (2014).

How does the aspect of the worth of the work relate to economic growth and the good life?

People have a need for a professional ethic: work that meets certain ethical and quality standards.

People ascribe value to the quality of their work. Where does this desire for craftsmanship come from and in what ways is it expressed? Sociologist Richard Sennett defines craftsmanship as a basic and lasting human driver, the desire to do good work, irrespective of the nature of the work itself⁴⁵. This motivation can be traced to the origins of humankind: humanity was created in the image of God; we imitate our Creator by creating too. The notion of creativity is deeply rooted in the European culture and has also become an important factor in our economy. We see this reflected in the founding of the Medieval Guilds⁴⁶ right up to the arrival of the creative classes⁴⁷ in the 21st century⁴⁸. Creativity leads to more than just economic growth and prosperity, it is also an important source of pleasure for people and therefore enables people to thrive and grow⁴⁹.

How does the aspect of creativity relate to economic growth and the good life?

Humankind is a creative being. Exercising craftsmanship gives people joy and makes them productive.

Arguing on the basis of Christian Democratic and sociological principles, we can identify five ways in which craftsmanship is expressed, five ways which are closely related to one another practically and conceptually. The first way in

- 45 | Sennett (2008), chapter 1, pp. 24-30. In this context Sennet also quotes the sociologist C. Wright Mills, who offered the following excellent definition: 'The labourer with a sense of craft becomes engaged in the work in and for itself; the satisfactions of working are their own reward; the details of daily labour are connected in the worker's mind to the end product; the worker can control his or her own actions at work; skill develops within the work process; work is connected to the freedom to experiment; finally, family, community, and politics are measured by the standards of inner satisfaction, coherence, and experiment in craft labour.'
- 46 | Quote: 'The guild craftsman took pride in the honour or good name accorded to men doing an honest job well. Productive human work was given cosmic significance: beside God and nature stood homo artifex, imitating nature.' Source: Black (2002)
- 47 | The term creative class has been used by economists and social-geographers to refer to professional groups such as academics, scientists, engineers, artists, people working in the cultural sectors, managers, and business professionals. Source: Aalst et al. (2006).
- 48 | See also the famous work by Richard Florida, 'The Rise of the Creative Class'.
- 49 | Cf. Genesis 1. 'And God saw that it was good'.

which craftsmanship is expressed is through beauty. A good quality product is first and foremost a beautiful product. Nature in all its beauty, and the human rendering of it in the form of artworks, provides a vast reservoir of inspiration. This brings us to the second expression of craftsmanship, which is learning. By studying nature and art and looking for the underlying patterns, we develop definitions of what the correct and harmonious forms, proportions and colours may be. In this way art and craftsmanship are synonymous⁵⁰.

After forming an idealized image of reality on the basis of our notion of beauty, we then apply our technical ingenuity to fashion reality to match this ideal. Technical ingenuity is therefore the third expression of craftsmanship. We acquire technical skills, along with our notions of beauty, through learning - and through practise. Richard Sennett states that all skills, even the most abstract, start with physical practise. This is then followed by the mental practise⁵¹: 'In the higher stages of skill there is a constant interplay between tacit knowledge and self-conscious awareness; the tacit knowledge serving as an anchor, the explicit awareness serving as critique and corrective.' We will return to the role of implicit knowledge that is crucial for economic development later in this study. By building on our existing knowledge we arrive at new combinations of ideas or techniques or both. This leads to the fourth expression of craftsmanship, which is imagination. The quest for the unknown and the Eureka (or 'ah-ha') moment when a discovery is made are important drivers of innovation. When something new meets a need and therefore creates added value economically (which may not always be the case), then it is considered to be an innovation. Innovation is not something that is easily achieved, neither in an intellectual nor a practical sense. Innovation means taking risks and dealing with uncertainties. Innovation often also invokes resistance, particularly among those with vested interests.

Enabling or fostering innovation demands the last attribute of craftsmanship, and that is leadership, or as it is referred to in the economic context, enterprise. It is the role of the entrepreneur to identify which innovations offer added value, to take carefully considered risks and to break down various forms of resistance. It was Joseph Schumpeter who attributed a central role to the entrepreneur in economic development and explained this role on the basis of human nature. He wrote the following about entrepreneurs^{52:} 'Entrepreneurs have the will to conquer, the desire to compete for the sake of it. There is also the joy of creating: of getting things done, or simply of exercising one's energy and ingenuity.' When an entrepreneur is given credit – credit in the sense of faith and in and the sense of a loan – then he or she is provided with the means to develop the idea and put it on the market. Enabling innovation through

^{50 |} Etymological reference to the Latin word 'ars' (plural 'artes') which means both skill and art.

^{51 |} Sennett (2008), p. 61.

^{52 |} Schumpeter (1983), pp. 93-94.

extending credit constitutes the essence of what we call capitalism. Faith is vital for a capitalist system to work.

How does the aspect of craftsmanship relate to economic growth and the good life?

People can attain their vision with the aid of a love of beauty, a willingness to learn, technical ingenuity, imagination and an enterprising spirit.

The work of an entrepreneurial artist like Rembrandt illustrates how much a love of beauty, willingness to learn, technical ingenuity, imagination and leadership are interrelated and reinforce one another. The self-portrait below, a masterpiece dating from 1630, is just such an example. This etching is a good example of craftsmanship, owing to the refined quality of the etching technique and the originality of the facial expression. The story in the introduction illustrates what else arose from this later in history.

1.5 Human shortcomings

Human hope – inspired by ambition, service and vocation; achieved through hard work, creativity and cooperation – is a source of activity and development. This is the vitality expressed by the Christian Democratic view of human nature. We know, however, that people also feel pressure, certainly in our times, in which the necessary conditions for activity and self development are available in abundance.

On the one hand, this pressure has a natural origin based on the fact that the life of a human being is not infinite, while people's desires and expectations are infinite. While on the other, pressure is created because the application of our human capacities in the short time that we have is not only an economic question that we can rationally solve, but also an ethical issue that we constantly struggle with. How can I combine the various dimensions of a satisfying life with one another? How can I be accountable, to other people and to God, about the ways in which I spend my time? In the Biblical parable of the talents, for example, the servants are given the order to trade them until the master returns⁵³. Which means they have to work under pressure, a time pressure.

^{53 |} It is important to note that according to the prevailing theological interpretation the most important talent is the talent of love. We find a similar reference in made by Paul in Romans 13: 'Owe no one anything, except love to one another'.



Figure 1. Rembrandt Harmensz. van Rijn. Self-portrait with beret, wide-eyed (1630).

The British journalist Matt Ridley once offered the following semi-serious definition of prosperity^{54:} 'Prosperity is a reduction in the time it takes to fulfil a need.'

People are impelled by needs and motivators, driven by time and therefore tend to by-pass themselves, others and God, not do them justice. This tendency we could refer to as a human shortcoming (as opposed to an economic deficit). There are various different types of human deficiencies, two of which we will discuss here as those which most closely touch upon the theme of this study. The first of these archetypes concerns becoming consumed by the need to fulfil needs and the desire to stand out. In this competitive struggle those who are weaker in society can end up becoming trampled. A second archetype relates to ambition which turns into pride. We build systems which deep in our heart we know we can never keep under control 55. Excessively complex

^{54 |} Ridley (2010), 5:51.

⁵⁵ Poet T.S. Eliot wrote about this: 'They constantly try to escape / from the darkness outside and within / By dreaming of systems so perfect / that no one will need to be good.' Source: Eliot (2004).

financial constructions, one of the causes of the credit crisis of 2008, is a modern-day example of such. We see this in the area of sustainability too: with past and present examples showing that the single-minded focus on a short term gain may be at the expense of the environment.

Human shortcomings have important implications for economic development. Institutions – defined as constraints imposed on human interaction to structure exchange, such as laws, character development and ethics⁵⁶ – are necessary to ensure that people take sufficient account of one another and to facilitate human growth. There is an important role here for government, both in creating positive external effects (e.g. through an education system which is accessible to all) as well as in inhibiting negative external effects (e.g. through competition). The paradox here is that even these institutions themselves, which are intended to temper human shortcomings, can become an instrument of pride⁵⁷.

Excessively complex legislation which smothers spontaneous initiatives is a contemporary example of such.

How does the aspect of human shortcomings relate to economic growth and the good life?

Institutions are needed to structure development and economic development.

1.6 Rest

Apart from the notion of human shortcomings, the constant activity of people also brings another association which can be illustrated by the following story. On a sunny Sunday afternoon the Scottish inventor James Watt took a stroll in the park. 'Suddenly,' he wrote later in his diary 'the idea came into my mind, that as steam was an elastic body it would rush into a vacuum, and if a communication was made between the cylinder and an exhausted vessel, it would rush into it, and might be there condensed without cooling the cylinder.' The devout Watt could hardly wait until Monday when he could build a new working prototype of the steam engine and achieve everlasting fame.

As the story shows, in the life of James Watt there was a fruitful interchange between activity and rest. This interchange takes place at various levels: at the level of needs, creativity and drivers. At the level of needs this is about rest in response to physical and mental efforts. Relaxation is the key here. In relation to creativity this is about finding a balance between inspiring others and being inspired by others. Meeting other people and being open to

⁵⁶ North (1992), p. 1: 'Human beings impose constraints on human interaction in order to structure exchange.' The word 'institutions' should not be confused with the organized form 'institutes'.

^{57 |} Safranski (2003), chapter 5.

nature and culture are the key elements here. In terms of drivers this is about approaching our daily work from the perspective of our vocation⁵⁸. What can we be proud of and where do we come up against human shortcomings? Contemplation is the key word here.

We see that economic activity and rest are complementary to one another, not only in the mental sense, but at a practical level too. Economic development creates an economic surplus, which creates the opportunity for us for enjoy our free time. This free time, in turn, enables us to find energy and inspiration for innovative ideas. In an economy where creativity and innovation have become increasingly important, rest and reflection are therefore essential. To ensure that this rest can descend on the whole country and to make it practical for people to meet one another and organize meetings, since it was first introduced by Emperor Constantine in 321 A.D., there has been a generally recognized day of rest, Sunday, which was later extended to the whole weekend⁵⁹. Since that time the day of rest has been strongly associated with freedom, freedom from needs and economic obligations⁶⁰, but also freedom for spiritual and intellectual development⁶¹.

How does the aspect rest relate to economic growth and the good life? Rest leaves people free to relax, meet one another and be inspired. This creates space for future development.

1.7 Prospects for earning potential

In this chapter we have seen that human growth and economic prosperity are closely related to one another. Here we have discovered a number of key themes, useful insights which we will return to several times in this report. Firstly, we have seen how human needs – the material necessities for a comfortable life – and human drivers, such as ambition, service and vocation, motivate people to work. In this way we create our own existence – the oikos, the household, that the word economy is derived from – and we contribute to a greater whole – the *bonum commune* or the general good.

People want to do work which meets moral and ethical standards as well as quality standards – there is a desire for craftsmanship. Craftsmanship is

^{58 |} Cf. Genesis 1: 'And God saw that it was good'.

^{59 |} De Jonge (2006).

^{60 |} Pieper (2009).

^{61 |} See, for example, the political philosophy of the Italian Renaissance thinker Marsiglio da Padua. Quote: 'Marsilius defines the civitas as the community in which men live civiliter, well, with leisure to pursue opera liberalia, liberal tasks, and to exercise the practical and speculative virtues of the soul.' Black (2002).

expressed as a love of beauty, willingness to learn, technical ingenuity, imagination and entrepreneurship. The key first theme revealed in this report can be summarized as creation. Creation translates into productive knowledge which we accumulate and constantly inwardly renew⁶². This is how people develop and thrive, and the good life generates economic growth and prosperity.

The second key theme expressed in this chapter can be summarized by the word recreation. In a literal sense this means that people take a step back from their creative activities. They take distance from their work so that they can enjoy the results of their work. Rest releases people so that they can relax, meet one another and reflect. In the middle of all the activity and time pressure, people have the tendency to disregard themselves and others – this is a human shortcoming. That is why a moderation of interest and institutions are necessary to structure both economic and personal development. Recreation is essentially the time people take to enjoy the fruits of their labours and plant the seeds for future human development and economic growth. Recreation also gives people the time to think about the purpose and meaning of life and what is worth creating. Both aspects are important in giving direction to society and the life of an individual.

If we bring together the two themes we have uncovered in this chapter - creation and recreation – we arrive at the following Christian Democratic definition of earning potential:

How do the aspects of 'creation and recreation' relate to economic growth and the good life?

The earning potential of a society is the extent to which people are able to contribute and can together enjoy the results of their contribution.

This definition of earning capacity is not exclusively Christian Democratic but contains a number of typically Christian Democratic principles. These principles constitute the start of four key themes which, in addition to the two previously mentioned themes of creation and recreation – we will further elaborate on in this report. These four key themes are: (1) ambition and entrepreneurship and the attendant need to place a value on difference, (2) cooperation and culture, (3) the diversity of people and an eye for quality, and (4) institutions.

The first principle in this context is that a Christian Democratic view of the economy is one in which people contribute – whether that contribution be large or a small, material or immaterial, paid or unpaid – and in this way find creative fulfilment. In other words: the structure of the economy should be such that people are encouraged to show ambition and entrepreneurial spirit. This can

^{62 |} Hausmann (2013).

only happen if there is appreciation of the differences between people and if everyone's unique contribution – whether they have had a higher education or not – is valued (professional pride)⁶³. Another implication is that from the Christian Democratic point of view, it is neither necessary nor desirable for everyone's contributions to lie in the domain of commercial transactions: we are in favour of a strong and independent public domain in which people can make a contribution without the pressure of the market or government, for example, in the form of voluntary work. A voluntary contribution, after all, has a completely different emotional value and a much more intuitive and closer link with important drivers in life such as service and vocation.

Secondly, as the word contribution already indicates, earning potential is not a goal in itself but refers to an external goal that we set in relation to others and which we achieve collectively. This collective aspect underlines the relevance of cooperation and culture. Economics cannot be seen as something separate from culture, in which we define culture as manners and the intellectual and artistic life of a society⁶⁴. Christian Democrats have always tried to connect economics and culture with one another. Following the Great Depression and ensuing Second World War, for example, the Christian Democrats were involved in the inception of the social market economy (Rhineland model or social market economy) based on the conviction that a culturally embedded economy would lead to a better society and stronger economy⁶⁵. We will return to the importance of culture and cooperation in later chapters.

The third aspect here is the diversity of people and the ability to recognize quality. The economy and society should be structured such that people's various facets can be allowed to develop harmoniously. The principle that this gives rise to is that development begins with the individual and not with possessions. The Greek philosopher Aristotle wrote⁶⁶: 'It is clear that in managing the household [oikos] more attention must be given to the family members and the development of their virtues than possessions or wealth.' The importance of human virtues and skills has been confirmed by the latest generation of economic growth models, known as endogenous growth models, in which human capital and the impact of education on the economy play a key role⁶⁷. We see this aim also reflected in the previously described notion of quality of life, which has increasingly become more central in the formulation of policy objectives.

^{63 |} See the study of the CDA Research Institute on the new boundaries (2015).

^{64 |} Eliot (1973).

^{65 |} Bovenberg, Neuteboom & Schenderling (2014).

^{66 |} Aristoteles (1912), p. 78.

^{67 |} See, for example, Lucas (1988).

We can further derive from this third aspect that it is important to focus on the person as a whole rather than just one or a few dimensions⁶⁸. Without an eye for quality, service, beauty, rest and all the other facets we have discussed in this chapter, sooner or later human growth and economic development will suffer. The same applies to the balance between work and private life which today is still is need of attention. This insight is insufficiently incorporated into the structure of the economy, even though it is starting to surface more often. The car manufacturer BMW, for example, recently introduced the 'right to be unreachable' to support the rest of its personnel, and the search engine business Google introduced the '20 per cent rule' in which employees were permitted to spend 20% of their time on their own projects⁶⁹. We will also return to the importance of being able to recognize quality in the next chapter.

The fourth aspect concerns institutions. There are formal institutions, such as laws, rules and other frameworks, and informal institutions, comprising customs and habits. Creating a virtuous circle of human growth and economic prosperity requires not only laws and rules, but also time, perseverance and a willingness to make sacrifices, at the level of both an individual business as well as in society. It is therefore important that we allow our decisions to be based on the long term costs and benefits, taking future generations into account, even though the costs and benefits in the longer term are generally more difficult to quantify⁷⁰. From this perspective we can then evaluate the functioning of the economy not only on the basis of the present prosperity generated by the economy, but also on the basis of the employment, the quality of work and the impact of the economy on the environment.

In the next chapter we will look more closely at the question of how the earning potential of a society evolves and what conditions are necessary for this.

^{68 |} The early Christian Democratic thinker Althusius (1557 – 1638), for example, argued that a person's soul should not be overlooked and considered spiritual development to be the most important task of government. He wrote: 'Government is relevant to both the body and soul of its citizens.... The prime responsibility of government is spiritual development, the second is livelihood and safety.' Source: Althusius (2010), chapter 1, p. 3.

^{69 |} Source: NRC (2014) and MT (2011).

⁷⁰ The seventh principle of the seven principles presented by Sybrand Buma at the CDA Congress on 1 June 2013. This idea also appears in the report of the Advisory Board 'Kiezen en verbinden' [Choice and loyalty] (2012).

2 Innovation and co-creation: how economic activity leads to economic development

Motto

'How much work is involved in combing, spinning and weaving clothes! The life of no single man is long enough to obtain all these things, unless the wonder and observation of many men, and collective experience, should come to the rescue.'

Juan de Mariana71

^{71 |} Juan de Mariana was a 16th century Spanish scholar. Source: Grice-Hutchinson (1952).

2.1 Introduction

In the previous chapter we investigated what drives people to become economically active. The answers we have formulated in response to these why questions, provide indicators for economic activity and show what goals the economy serves.

At the start of the previous chapter it was already suggested that the results of economy activity can be surprising, in terms of both welfare and prosperity. In this chapter we will look more closely at the development process: the steps people take based on their motivations in order to reach their ultimate results. In other words: we will focus on the how question: how does economic development come about and what is necessary to achieve the best results? We have written this chapter, just as the previous one, from the perspective that human growth is connected with economic growth. We will also consider recently published academic work about the nature of economic development.

The starting point for the analysis of economic development is the notion that people are creative beings with a deeply rooted desire to do good quality work (craftsmanship). In this chapter we will see that creativity and craftsmanship can take numerous forms. This has two important implications for economic development. The first implication is that people are inclined to introduce innovations to every conceivable degree of activity – at individual, corporate or even society level. The work that people do is therefore constantly subject to change.

The second implication is that the diversity of people's talents encourages them to work together. A wide range of forms of cooperation arise from this, which are vital to economic development. As described in the previous chapter, it is by no means automatically the case that human interactions bear fruit. Institutions are required to structure human interactions. These institutions need to have a strong balance between stability and responsiveness. We will therefore conclude this chapter with an explanation of the role of institutions and how to strike a balance between stability and responsiveness.

2.2 Technical innovation

A creative craftsman continually introduces innovations into the product and the production process. Gradually craftsmen and women develop numerous techniques which enable us to mould reality to fit our ideal. The application and study of techniques, in turn, change our way of thinking, which gives us new ideas about the product and the production process. In this way there is a beneficial interchange between people and technology, in which technical knowledge, which in this chapter we will refer to as specialist knowledge, constitutes the vital switching point. Sociologist Richard Sennett described this interaction

as follows⁷²: 'Believing in correctness drives technical improvement; curiosity about transitional objects evolves into definitions of what they should be.'

A large part of the specialist knowledge that people hold is implicit or 'tacit' knowledge, which is knowledge that people unconsciously attain only through constant practise and which is therefore difficult to transfer or copy. Given the amount of time and effort it takes to transfer specialist knowledge, it behoves people to specialize, for example in a cooperative context⁷³.In this way knowledge becomes embedded in society. Some specialisms are embedded in certain people, some in groups of people in organizations. Specialization leads to greater productivity and therefore economic growth. Furthermore, specialist knowledge gives people a position on the employment market, job satisfaction and a sense of self-worth.

How does the aspect of specialist knowledge relate to economic growth and the good life?

Creativity and craftsmanship lead to the development of specialist knowledge. Specialist knowledge gives people job satisfaction and a position on the employment market, and further provides for specialism and economic growth.

The acquisition and organization of specialist knowledge enables people to build on one another's knowledge, so that the overall level of knowledge in society increases. The transfer of this knowledge to new generations – a process that begins in infancy as part of the upbringing – ensures that people learn to find their way in life. In this way knowledge transfer can continue to raise the productivity of a nation and create opportunities for new generations to make new discoveries themselves. In other words: knowledge acquired by just one person ultimately brings benefits for the entire society.

Education is the first and most important source of these 'knowledge externalities'. The more complex an economy becomes with rapid technological advances being made, the more difficult it is to maintain specialist knowledge while existing knowledge also becomes increasingly quickly obsolete⁷⁴. This means that education in a modern economy can gain ground not only by providing formal forms of learning, but more specifically through informal methods of learning in a commercial context and by making mistakes.

The introduction of product innovations or innovations in production processes presents many challenges and obstacles for business people. As indi-

^{72 |} Sennett (2008), pp. 124-130.

^{73 |} Hausmann et al. (2013).

^{74 |} Chapter 3 provides a comprehensive description of the current state of technology.

cated in the previous chapter, only changes which add value can properly be described as innovations. Innovation is also difficult to bring about, given that the innovation process is surrounded by uncertainties and innovations invoke resistance among those with vested interests.

This leads to a conclusion with economic implications, which is that based on human nature we may expect that there is a constant, endless stream of innovative ideas, but that the application of innovations requires specific human qualities – particularly leadership – and specific circumstances – in particular tolerance of differences – both of which are rare. These human qualities and social circumstances are also cultural in nature, which means that they cannot easily be influenced and certainly cannot be created on demand. In short, there is often a sufficient supply of innovative ideas in the economic sense, but a shortage of demand for them⁷⁵.

This has major implications for policy, which we will turn to later in this report. Ultimately, economic development will be a factor of the amount of specialist knowledge that a society manages to retain and the number of useful applications of specialist knowledge that a society manages to achieve⁷⁶. Many academic papers and liberal manifestos still point to the individual and individual knowledge as the basis for economic success. This does not tally with the real nature of economic success, in which cooperation and culture play vital roles. Christian Democrats are aware of this cultural and economic aspect of the earning potential of a country and contest the individualistic notion of the knowledge economy in favour of an embedded knowledge economy. This view will be further elaborated on in the rest of this chapter.

How does the aspect of technological innovation relate to economic growth and the good life?

Innovation (including technological innovation) demands good education, a culture of leadership and tolerance of differences.

2.3 Social innovation

People have received different talents and use them in different ways. Christian Democracy considers these differences to be positive, because these differences mean that people need one another and therefore will approach one another⁷⁷. Communities and individuals strengthen one another both eco-

^{75 |} Rodrik (2004a).

^{76 |} Hausmann et al. (2013), section 1.

^{77 |} Althusius wrote: 'God has distributed his gifts in diverse ways among men. He did not give one person everything, but different things to different people, so that I

nomically – because specialization and interchange lead to greater prosperity – and socially – because people enjoy working together⁷⁸. This attitude can be described as a collegial attitude based on trust and which is cultivated with the aid of rules and customs. This takes place in organized labour, for example, where people work together productively. This means that the earning potential of a country to a large extent will be influenced by its social fabric, the connections between people.

The third way in which communities and individuals strengthen one another is through their free time. Through specialization and cooperation there is time left over for social, cultural and spiritual ties. Free time also provides the opportunity for the collective development of creative skills, which indirectly help to strengthen people's economic capacity.

Social innovation is a way of promoting human growth and development as well as economic growth that is often overlooked. The policy debate focuses mainly on technological innovation. However, when we divide economic activity into transformations – adding value to raw materials, with or without the use of technological means – and transactions - the exchange of added value through cooperation – then we discover that the cost structure of modern economies has shifted considerably over the last few decades. While in the past the largest share of the total costs were incurred for transformations, today an almost equally large share of the cost is spent on transactions⁷⁹.

The reason for this is that through the use of technology and process innovations, the transformation of raw materials has become increasingly cheaper while the transaction costs have become relatively higher due to the growing complexity of the world economy, e.g. as a result of globalization and the breaking up of production chains⁸⁰.

The arrival of the internet has also brought more dynamism: the internet makes faster worldwide transactions possible, on the one hand – which has a downward effect on transaction costs – while the internet has also led to an explosion in new and ever more complex transactions – resulting in upward pressure on transaction costs. All in all we can conclude that the transaction cost economy together with the ongoing digital revolution has changed the essential nature of the economy.

The changing nature of the economy has a major impact on the way in which we innovate. We therefore need to change our notion of innovation in which cooperation plays a vital role. Organization form and culture both have a

need what you have and you need what I have; thus arose the necessity of sharing what is useful.' Source: Althusius (2010).

^{78 |} The Medieval philosopher Marsiglio da Padua (1280-1343) spoke of the 'civilis amicitia'. Source: Black (2002).

^{79 |} Wallis and North (1986).

^{80 |} Grossmann & Rossi-Hansberg (2006).

demonstrable impact on the amount of transaction costs and the development of new products and production methods⁸¹. This means that social innovation can help to improve productivity and therefore economic growth⁸².

Social innovation is a relatively new concept which was introduced around the start of the 21st century. We define social innovation in this context as new ideas which are introduced in the way in which people work together, e.g. new forms of organization, forms of steering or cooperation such as flexible working, digital platforms for cooperation, inspiration sessions, to promote interdisciplinary cooperation, etc.⁸³. Various studies have shown that social innovation leads to better performance by organizations; however, these studies take many widely differing approaches and are also difficult to apply in policy terms⁸⁴. Therefore we will now turn to a number of different dimensions of cooperation and the conditions necessary for this.

How does the aspect of cooperation relate to economic growth and the good life?

Cooperation and improving it through social innovation will help to improve productivity and job satisfaction.

Cooperation between people is closely related to knowledge development and technological innovation. This is because cooperation enables ideas to be combined in new ways that may ultimately lead to innovation. Cooperation is also vital for the further development of complex ideas to create operational goods and services, as well as their marketing. On top of this, knowledge can be described as a non-rival good: ideas lead to positive effects not only for the conceiver, but because everyone can make use of the knowledge, it also raises the overall level of knowledge which, in turn, brings forth more new ideas⁸⁵. Cooperation is, therefore, alongside education, the second source of knowledge externalities⁸⁶.

Economic research has shown that a fine balance is required for there to be a beneficial cross-fertilization of ideas: the cognitive distance between the cooperating partners should not be too small because this will not generate any original and ground-breaking combinations of ideas; but the cognitive distance between the partners must not be too wide either because this can lead to misunderstanding and therefore stand in the way of useful combinations of ideas⁸⁷.

^{81 |} Williamson (1985), chapter 1.

^{82 |} Volberda (2007).

^{83 |} Ibid.

^{84 |} Pot (2012).

^{85 |} Hausmann et al. (2013), section 1.

^{86 |} Stegeman (2012), pp. 12-15.

^{87 |} Nooteboom et al. (2007).

Vicinity is another important factor: ideas can most easily be transferred when people can come together, e.g. in regional networks or clusters. This leads to agglomeration effects, or knowledge spillovers⁸⁸. The vicinity of cooperating partners together with an optimum cognitive distance between one another is not something which happens by itself. What is even more difficult is that after a collective idea has been born, to find collective investment for it. In other words, there are coordination externalities⁸⁹: this means that third parties, e.g. government bodies or research institutes, are required to coordinate location choices, exchange choices and investment decisions with one another.

How does the aspect of social innovation relate to economic growth and the good life?

The right cognitive distance, vicinity and coordination between partners working together will lead to beneficial cross-fertilization of ideas (i.e. organized chaos).

2.4 The importance of culture

Viewed in the context of the Christian Democratic body of thought, we would expect that not just 'hard' but also 'soft' conditions, such as culture, would be necessary for there to be cooperation and a good cross-fertilization of ideas. Scientific research confirms this and shows that it is not just the culture of a nation which has a significant impact on the results of cooperation, but regional culture too. A study of the entrepreneurial culture in various European regions, for example, noted that regions in which the various facets of entrepreneurial culture, such as personal responsibility and appreciation of risk taking – were expressed more, were also more innovative and showed stronger economic growth⁹⁰.

Another aspect concerns the effect and extent of hierarchy on the results of cooperation: the egalitarian attitude which is typical of the Dutch means that Dutch businesses are good are the development of products requiring considerable improvisation ability. This also applies to the development of products involving many uncertainties, so that progress can only be made by making continual improvement suggestions, testing them, examining them critically and making adjustments. As in the building of chip machines, for example. In this way, the Dutch culture makes an indirect contribution to the Netherlands'

^{88 |} Marshall (1997).

^{89 |} Rodrik (2004b).

^{90 |} Beugelsdijk (2007).

earning potential. See the textbox below for a brief sociological description of the national culture of the Netherlands.

National character the Netherlands

Who better to describe the quirks of the Dutch culture than a relative outsider? The American sociologist Ruth Benedict conducted an ethnographic study of the national character of the Netherlands and made many acute observations which offer insight into what is typical of Dutch culture and what it can contribute to the world⁹¹.

Benedict portrayed the Dutch as moralistic, individualistic, liberty and peace-loving, tolerant, self-assured, proud, ironic, puritan, tidy, prudent, thrifty, conservative, domestic, serious and somewhat melancholy. She wrote⁹²: 'The typical Hollander is so sure of himself that he does not submit to dictation but stands up for his [sic] rights'. This does not mean however that the Dutch do not have a sense of national irony93 :Among themselves they run down even their own beloved country and its ways.... Their behaviour includes no flattery and little 'praising up'". Benedict asserts that the Dutch love of liberty provides the basis for tolerance of those who think differently, which makes it easy for them to make contact with strangers⁹⁴. In their speech they may be intolerant and condemnatory, but they grant their opponents' right to have his [sic] say.' With regard to the economically oriented characteristics Benedict refers to prudence, in which she makes mention of the Dutch proverb 'niet over één nacht ijs gaan' [be on the safe side] as an example 95. Benedict also notes that the Dutch are serious, which is seen in the great importance that the Dutch attach to education, for example.

Hans Clevers, President of the Royal Netherlands Academy of Arts and Sciences (KNAW), summarized the contribution of Dutch culture as follows⁹⁶: 'Our main strength lies in the Dutch culture. We are curious and outward looking. We are ambitious, but collaborate easily. We share successes as well as setbacks. We are insensitive to authority and argue.... about anything. Not good for an army maybe, but extremely fruitful in science.'

^{91 |} Ginkel (1992).

^{92 |} Ibid, p. 53.

^{93 |} Ibid, p. 54.

^{94 |} Ibid, p. 54.

^{95 |} Ibid, p. 58.

^{96 |} Clevers (2014).

How does the aspect of culture relate to economic growth and the good life?

Culture has a significant impact on the results of cooperation and therefore on the earning potential of a nation.

2.5 Institutional innovation

In the conceptual context of rational thought, e.g. many economics textbooks, technological and social innovations are all that is needed to ensure growth and prosperity and to maintain it. This view raises questions. Not least because technical and social innovation took place also in the pre-industrial era. While large swathes of the population saw little or no lasting economic improvement in their lives. How is that possible? Clearly a narrow view of the economy cannot adequately explain growth.

The Christian Democratic view of human nature points to human short-comings (see chapter 1). When applied to economic plans and activities this means that such plans and activities are couched in uncertainties, while people have a limited understanding and we are not capable of processing all the available information and always making the right decisions. Restrictions are therefore necessary – delimitations - which make these uncertainties manageable in human interchange⁹⁷. These restrictions are formal and informal institutions to structure human interactions. Economist and Nobel Prize Winner Douglass North wrote in this context⁹⁸: 'Strong moral and ethical codes of a society are the cement of social stability which makes an economic system viable.'

Although the literature on economic policy devotes considerable attention to formal institutions – legal and regulatory frameworks, incentives and forms of enterprise – Christian Democrats also take into account the value and relevance of informal institutions. This has to do with the relevance of cooperation, as described in the foregoing sections. It also has to do with unseen forms of friction and uncertainty, to which informal institutions can offer elegant solutions.

This approach throws an interesting light on the economic reality. Empirical research, for example, shows that large companies enjoy economies of scale, but how do smaller companies then manage to survive? The answer can only lie in the unseen social fabric that connects people and organizations and creates an alternative competitive advantage for smaller businesses, e.g. in the form of personal service which leads to greater added value and better cus-

^{97 |} North (1992).

^{98 |} North (1992), pp. 1-3.

tomer loyalty. An example is the small business operator on the street corner who, because he knows his customers and how to deal with them, can offer customized solutions that other businesses cannot.

Policy-makers should not overlook this aspect.

Just as with the tacit knowledge that people hold, the institutions of a society cannot easily be transferred or copied. Increasing the ability of institutions to adapt to changing circumstances would therefore be a sensible strategy for achieving long-term competitive advantage⁹⁹. An example of this is the successful cooperation between employers, employees and government under the Dutch 'Polder model'.

Institutions are otherwise path dependent, which implies that institutional innovations will be most successful when they are built on existing institutional patterns. The next section will consider the balance between stability and adaptivity.

How does the aspect of institutional innovation relate to economic growth and the good life?

Formal and informal institution structure human interaction in positive ways. Institutional innovation can lead to long-term competitive advantage.

2.6 Stability and adaptivity

Innovation will ensure that the economy is constantly being transformed from the inside out. Despite the persistent tendency of economists and policy-makers to rationalize the process of economic development, i.e. to act as if it is explainable and predictable, economic development is essentially an unpredictable process of faltering steps, marked by failure and friction¹⁰⁰. While Liberals and Social Democrats follow this tendency to rationalize – a tendency which is expressed, for example, in the blind belief that increasing investment in research and development will by definition lead to economic growth (as if there were a linear connection), based on the Christian Democratic view of mankind and society, we believe that the shortcomings and unpredictability which so profoundly affect society and economic life should not be overlooked.

This understanding of shortcomings and unpredictability influence our thinking on the economy and society in two ways. Firstly, it keeps us from thinking that there are 'perfect' economic institutions that will maximize prosperity.

^{99 |} WRR (2013), chapter 11.

^{100 |} Quote: 'That form of economic organisation in which the goods necessary for new production are withdrawn from their settled place in the circular flow by the intervention of purchasing power created *ad hoc* is the capitalist economy.' Source: Schumpeter (1983).

Secondly, this awareness of shortcomings and unpredictability prevents us from holding the misconception that institutions are an 'obstacle' to unbridled competition. Because aiming to create perfect economic institutions and the goal of unbridled competition harbour the same danger, i.e. that people are forced into an economic straightjacket.

This is no imaginary danger. The celebrated columnist Thomas Friedman, for example, in the late 1990s wrote frankly and in laudatory terms about 'the Golden straitjacket' – a set of economic measures which would increase prosperity and therefore should be embraced by every country¹⁰¹. This type of thinking still prevails. In the science of economics and economic policy, for example, there are studies about the earning potential of the Netherlands which devote a great deal of attention to the prosperity benefits of liberalization of the labour market, while relatively little attention is devoted to the effect of liberalization of the labour market on people's well-being. This line of thinking is not so very surprising: the prosperity benefits of such economic measures are (in the short term, at least) explainable and quantifiable, while the effects on people and society (in the longer term) are uncertain and not quantifiable.

In short, it is by no means so that the economy is structured in such a way that economic growth and human development go hand in hand. What does this mean in relation to economic institutions? Based on the understanding that reality is not perfect and that we do not precisely know how our interventions will affect reality, Christian Democrats would argue that a careful balance needs to be struck between stability and adaptivity.

This requires openness on the part of institutions, on the one hand, so that their goals – people's freedom and dealing with unexpected circumstances - remain in sight. On the other hand, social stability needs to be preserved, so that people can maintain their footing and security. Both these points we will further expand on in the sections below. Whether to choose adaptivity or stability in any given situation will regularly give rise to doubt. But as the German Chancellor Angel Merkel said about this 102: 'The economy and the financial system should serve the people and not the other way round. That means nothing other than what we have always been led by, and that is: when in doubt you must choose in favour of people.'

As indicated in the previous paragraph, it is important that that a country's institutions exhibit a certain degree of openness. There needs to be room to experiment, to make and correct mistakes. Societies with a high degree of tolerance for institutional diversity are more successful in the long term¹⁰³. The

^{101 |} Friedman (1999).

^{102 |} Merkel (2011), p. 13. Actual quotation;; 'Die Wirtschaft und die Finanzwirtschaft müssen den Menschen dienen, nicht umgekehrt. Das heißt doch nichts anderes als das, was uns immer geleitet hat: im Zweifel für den Menschen wählen.'
103 | North (1992).

Turkish economist Dani Rodrik summarized this as follows¹⁰⁴: 'Development is fundamentally about structural change: it is about producing new goods with the new technologies and transferring resources from traditional activities to new ones.' According to Rodrik there is no reason to assume that the institutions of modern economies have reached the end of their development and it is worthwhile to incorporate institutional experiments in economic policy¹⁰⁵. In the following chapters we will therefore be looking at a number of Dutch institutions and making recommendations about the changes which will be necessary in order to be able to respond to changing global needs.

How does the aspect of stability and adaptivity relate to economic growth and the good life?

Institutional diversity and the incorporation of institutional experiments strengthen the long term resilience of institutions.

Although the benefits of structural change are huge, we should not forget that people caught up in this dynamism will always need to have rest and security. Schumpeter, a thinker who more than any other recognized the benefits of innovation, pointed out at the same time that crumbling social stability represented the greatest threat to the capitalist economic system¹⁰⁶. In other words, there is a degree of opposition between creation and recreation, activity and rest. It is not difficult to find contemporary examples of this. When, as a result of unfathomable economic changes, people find themselves with their back up against the wall, this can weaken their strong motivations or even lead to anxiety and psychological problems.

Various studies of the SCP, for example, reveal the 'paradoxes of economic development': on the one hand, people are pleased with the extra freedom that economic flexibility brings while, on the other, they feel constantly under mental pressure because of the ongoing training and retraining for changing jobs and roles¹⁰⁷. For many years there has been a worryingly high percentage of people affected by a burn out, i.e. approximately 12-13% of all Dutch employees¹⁰⁸.

Another telling paradox is that most of the population prefers to keep work and free time separate, e.g. by respecting Sunday as a day of rest, while at the

^{104 |} Rodrik (2007), p. 6.

^{105 |} Rodrik (2004b).

^{106 |} This appears in the famous work of Schumpeter 'Capitalism, Socialism and Democracy' dating from 1942. See: Schumpeter (2008).

^{107 |} Breedveld & Van den Broek (2004).

^{108 |} Source: CBS Statline, average burn out percentage 2008-2013.

same time, most of the population would like the shops and other facilities to stay open longer¹⁰⁹.

The underlying cause of the paradoxes of economic development we have already encountered in chapter 1 of this report, i.e. that people are not aware of their own needs. What this boils down to in contemporary terms is that people are always inclined to overestimate their own rationality and to make the world more logical and understandable than it actually is. This wrong assumption makes us foolhardy, we think we can conquer the whole world and lose sight of our real innermost needs.

We therefore need a strong culture, one with deeply-rooted traditions and challenging artists, to constantly remind ourselves of our deeper, spiritual needs. It states the following in the encyclical letter 'Caritas in Veritate' 110: 'Development must include not just material growth but also spiritual growth, since the human person is a unity of body and soul'.

How does this apply to the structure of the economy? Is it even possible to hold onto a strong culture when faced with the economic tumult which literally comes at us from every corner of the world? Schumpeter, who had been a businessman himself and in a very turbulent period – between the two World Wars – had served as Austria's minister of finance, was pessimistic about that: he predicted that the capitalist economic system would undermine deeply-rooted traditions to such an extent that the system would ultimately become the victim of its own success. Christian Democrats would do well then to heed Schumpeter's warning and set clear boundaries concerning what does and does not belong in the economic domain. For these reasons we do not consider increasing the level of workforce participation to be a goal in itself, nor are we in favour of (longer) Sunday opening hours, for example.

2.7 Prospects for earning potential

In this chapter we have described how economic development takes place based on three forms of innovation: technical innovation, social innovation and institutional innovation. On the basis of recent scientific insights we have also argued that one of the key themes that we identified in the previous chapter, i.e. cooperation and culture, are vital to each of these three forms of innovation. This argument can be summarized as follows: a strong culture contributes to economic growth, and economic growth contributes to a strong culture. It is therefore important that policy does not focus too narrowly on flexibility but rather takes into account the various cross-overs between technical, social and institutional innovation.

^{109 |} Swierstra & Tonkens (2002).

^{110 |} Benedictus XVI (2009).

In essence, the literature on economic development also supports the main theme of this study, that economic development and human development go hand in hand. The British economist John Kay therefore rightly said¹¹¹, 'Our [economic] success depends in the most crucial sense on our relationships with other people. Something that develops organically often leads to better performance than that which is designed, and purely instrumental policy often fails to achieve its goals.'

How does the aspect of culture relate to economic growth and the good life?

The connection between economy and culture is vital to welfare and prosperity in the long term.

3 | Creative destruction: trends and developments impacting the economy

Motto

'The study of adaptive systems like an economy will be facilitated not by focusing on statistical aggregates but by recognizing the importance of idiosyncratic knowledge—which, by its nature, cannot be summarized by statistical measures.'

Friedrich von Hayek¹¹²

3.1 Introduction

In the previous chapter we investigated how economic development takes place. Three forms of innovation were identified which act as the drivers of development, these are technical, social and institutional innovation. An important conclusion is that development is not a smooth process, but one in which things which were once certain become open to question: and are either renewed from within, or disappear and are replaced by something else. This process is also known as creative destruction¹¹³.

As thinkers such as Schumpeter and Hayek accurately observed, adaptive systems can best be steered by focusing our attention on tacit knowledge and investigating what changes in the environment require us to revise this implicit knowledge. In this chapter we will therefore look at global trends and developments and how these influence the economy; what existing implicit knowledge is made obsolete by global changes and what new tacit knowledge is required to maintain the earning potential of the Netherlands as a nation?

The survey of global trends and developments provided in this chapter reveals a high degree of urgency: developments can be observed – such as demographic, ecological and technological developments which will affect not only the results of economic development but the economic development process itself, that will touch on every element described in the previous chapter. Furthermore, these developments are becoming increasingly rapid.

We have undertaken the analysis in this report on the basis of strategic principles. This means that we will first undertake a thorough analysis of the environment and then, based on the strengths and weaknesses of the economy we are studying, we will attempt to identify the strategic options most likely to succeed. This chapter is devoted to the environment analysis. In chapter 4 we will then investigate what effect the global trends and developments may be expected to have on the Netherlands' economic structure. Following which we will look at the areas in which the Netherlands is either better or less well placed. Finally, we will set out the contours of some guiding principles which could enable Dutch goods and services to more closely meet the changing global needs. In the fifth and final chapter of this report we have fleshed out these guiding principles to make specific policy recommendations.

3.2 Tectonic shifts

A thorough environment analysis enables the various dynamic environmental factors to be ordered and placed in a hierarchy in a way which reveals the strategic implications. The authoritative American National Intelligence Council, which provides the American government with strategic information, does this

^{113 |} Schumpeter (1983).

as follows¹¹⁴. Worldwide developments which have a major impact and which can be predicted with a high degree of certainty are referred to as 'tectonic shifts'. Developments which are less likely to occur but that would have a significant impact on the fabric of society, are known as 'game changers'. Finally, it is also important to take unforeseen threats into account, known as 'black swans', which are unpredictable but which do demand robustness.

If we look at how the world is moving towards 2030 then there are two important tectonic shifts that can be discerned: demographic changes and the growing scarcity of natural resources. Both of these developments will have a huge impact on Dutch businesses and our economic structure. Here we will briefly consider the four most important demographic developments. We will discuss the challenges in the area of sustainability in a separate section (3.4 below).

Ageing population

The four most important demographic changes are an ageing population, a smaller but significant group of young emerging economies, increasing levels of migration, and urbanization. The ageing population affects mainly European countries (and Western Europe in particular) that saw a post-war 'baby boom' during the 1950s and 60s and since then, a relatively low birth rate. As a result of the ageing population, fewer people working will have to contribute more resources to support those not working, and therefore the ageing population could put public facilities and intergenerational solidarity at risk¹¹⁵.Not just the age profile of Western European countries is changing but the household composition as well: households are getting smaller and there has been an increase in the number of households with a differentiated makeup¹¹⁶.

Emerging economies

Despite the ageing population in Europe in general and Western Europe in particular, it is expected that on balance the world population will grow over the next 20 or 30 years to reach about 8.3 billion people by 2030¹¹⁷. The underlying reasons for this is that on other continents, specifically Asia and Africa, there is population growth coupled with rapid economic growth. These two developments are connected because when a relatively large group of young people starts to become economically active as a result of rapid population growth this then yields extra economic growth (temporarily), also referred to as demographic dividend 118. The result of this development is that there are plenty of export opportunities in emerging economies for businesses all over the world.

^{114 |} National Intelligence Council (2013).

^{115 |} CPB (2014b).

^{116 |} Ministry of the Interior and Kingdom Relations (BZK, 2013).

^{117 |} National Intelligence Council (2013).

^{118 |} European Commission (2012).

Increasing migration

The world is globalizing, which means that countries and are becoming increasingly economically and politically entangled with one another¹¹⁹. Following a short interruption due to the Great Recession that began in 2008, globalization is expected to continue expand further to improvements in transport, IT and communications. As with previous waves of globalization in the 19th and 20th centuries, the globalization wave of the 21st century will also result in major migration movements¹²⁰. Age and income differences between countries will make it attractive for people to try their luck in countries where their skills and talents are relatively scarce and therefore better paid than in their own country.

Urbanization

An ever greater proportion of the world population will live in cities: it is expected that by 2030 about 60% of the world population will be living in cities¹²¹. An important positive effect of urbanization is that people with an entrepreneurial outlook get the opportunity to develop. Urbanization also brings various economic challenges such as the development of public services, the need to extend the urban and general infrastructure, and the demand for more advanced or higher quality forms of production, such as food production.

How does the aspect of tectonic shifts relate to economic growth and the good life?

Demographic changes and the growing scarcity of natural resources demand more advanced and more sustainable production methods.

3.3 Technological change as a game changer

A worldwide phenomenon which because of its unpredictable nature could be described as a game changer is technology. Technological advances which have a long-term economic impact are also known as long waves. The present long wave affecting the world economy arises from the combination of IT, communications technology, production technology, energy and biotechnology.

With a long wave which is still rolling it is difficult to tell whether the wave has reached its maximum height or is still climbing. Scientists hold the view that the greatest impact of the present long wave still has to come, some even speak of a Third Industrial Revolution¹²². The argument presented for this is that some technological developments are exponential by nature. Exponential

^{119 |} Friedman (1999).

^{120 |} National Intelligence Council (2013).

^{121 |} National Intelligence Council (2013).

^{122 |} Jacob & Jänicke (2009), pp. 3-8.

changes imply that the impact of the change may be small to begin with, but will be disproportionally greater in the final phase. Examples include the exponential increase in the calculation power of computers or the expected exponential increase in the use of solar cells (see section 3.6 on growing scarcity of natural resources).

Technological advances affect not only the outcome of economic developments but also the economic development process itself. That is why it is important to look more closely at the nature of the technological changes and their impact on the future structure of the economy. We will consider the combined impact of three important technological trends. These are: (1) automation of production due to IT improvements, (2) fragmentation of production further to improvements in communications technology and transport facilities, and (3) greater flexibility in economic transactions due to the arrival of digital exchange platforms.

Information technology (IT) and automation

IT enables more and more tasks of a routine nature to be automated. This goes beyond purely physically routine tasks, as in the past, but increasingly also applies to cognitive task of a routine nature, such as administrative, accountancy or judicial work. With the arrival of Big Data and the better analysis techniques that come with it, this process will be speeded up owing to the exponential growth in computing power, as described above. This will have a major impact on the working population and earning potential, a development which has not gone unnoticed as shown by the public debate that has arisen about robots and automation. The implication for tacit knowledge in society is that non-routine skills, such as creativity and social skills will gain ground 123.

Communications technology and the fragmentation of production A combination of improvements in communications technology are

A combination of improvements in communications technology and a reduction in transport costs makes the division of labour much cheaper. This then means that thinking in terms of sectors and branches of industry is becoming increasingly irrelevant, while competing at task and skill level is gaining ground 124. In many sectors for example it is no longer necessary to bundle tasks to execute them. The Netherlands Bureau for Economic Policy Analysis (CPB) writes 125 that 'tasks which were once bound up together can now be separated and traded.'

In addition to which rapid communications and transport facilities make it easier to split up production chains geographically, which means that more and more links in production chains which were previously integrated can now be

^{123 |} Den Butter (2013).

^{124 |} Ibid.

¹²⁵ Ilbid.

moved to the economically most favourable location. The complementarity of man and machine means that some tasks will continue to be tied to a location while other tasks are being increasingly offshored, or moved abroad 126. This means that future jobs will increasingly depend on products and services in which creativity is a vital component, not just at the design phase, but also in the production and supply phases. Because through the use of creativity products and services will more closely match people's needs and because creativity is a typically human characteristic, people will be required to make this happen.

Digital platforms and the on-demand economy

The advent of smartphones and digital platforms has made the exchange of goods and services faster, more flexible and more remote. Examples of such platforms include online market places, car sharing services and room rental platforms. The greater speed in combination with a wider scope and transparency of supply and demand, leads to a better negotiating position for consumers, and thus the economic impact of these developments can be summarized by the term 'on-demand economy' 127.

3.4 Impact of technological trends on economic results

As indicated in the introduction, the technological developments described here affect both the outcomes of economic development as well as the economic development process itself. We note that there are both new opportunities and serious threats to the results of economic development.

The most important new opportunity offered by the present technological developments is the ability to reduce the under-utilization of human and economic potential. Tasks will be less bound to a fixed location or set production chain and further to digitalization there will be more opportunities for people to contribute in a more flexible manner, including those who under the traditional economic model were not given the opportunity to contribute. Finding a balance between work and private life will also be made easier if people who are working can decide for themselves where, when and how they achieve their work results.

Automation of the more routine tasks will also mean that only the most human tasks will be left over from the production process to be carried out by people. Conversely, this means that just as with the previous industrial revolutions, room will be created for new activities which add value, something which will certainly happen given the motivations which drive people described in

^{126 |} CPB (2013), p. 19. 127 | The Economist (2015).

chapter 1. This will lead to the creation of new jobs and vocations, such as the development of serious games.

However, unlike in the greater part of the 19th and 20th centuries, automation and economic growth will not automatically lead to more jobs. Recent economic studies show that employment in the middle segment of the labour market has already been declining for some time and it is expected that this decline as a result of automation will continue and gain in tempo¹²⁸. It is possible that jobs will be created in the higher and lower segments of the labour market, but in many countries this does not (yet) appear to be sufficient to compensate for the job losses in the middle segment. There is then a risk of 'jobless growth', a risk which will only increase with further globalization, because globalization makes it easier to replace labour with capital¹²⁹.

To sum up, the answer to the question of what automation means for the future of economic development is not a black and white one. Flexibility, on the one hand, offers opportunities to reduce the under-utilization of human and economic potential and new sectors will arise, such as the creative sector, which will create new employment opportunities. However, this will not, as in the past, benefit all the population. The employment and wages of the low-skilled and those with only a secondary education will permanently be affected by downward pressure¹³⁰, while the rising creative class will benefit the most from the new opportunities provided by technology. As with the previous industrial revolutions, this will lead to a new social issue the contours of which can already be seen and which we specifically want to draw attention to in this report.

New social issue

What are the contours of this new social issue? The most important phenomenon that is occurring is that globalization is gradually leading to a new form of economic division. The leverage of global online platforms means that people with few talents can benefit the most from these while people with average abilities cannot 131.

This leads to a situation in which the globalization winners have a surplus of money and a lack of time while the reverse applies to the losers. This has a catalytic effect on the on-demand economy, because digital platforms make it possible for people to hire help for more and more of their daily tasks, such as cleaning and cooking 132. This comes with new forms of social injustice. An American journalist recently wrote in an article in the New York Magazine that he was shocked to discover that the cleaner he had hired through an

^{128 |} Frey & Osborne (2013).

¹²⁹ Caballero & Hammour (1997).

^{130 |} Frey & Osborne (2013).

^{131 |} The scientific term for this phenomenon is 'economic rent'.

¹³² Ilbid.

internet platform is forced to accept such low rates for his services that he is homeless¹³³.

The on-demand economy therefore puts the negotiating position of a large group of working people under pressure. An example of this in the Netherlands relates to employees who are made redundant by their employer only to be rehired as self-employed people at conditions which on balance leave them worse off. Another example is self-employed contractors who are hired on a project basis and as a result end up earning less than the minimum wage. These are new forms of exploitation – which could be described as the 21st century version of casual labour. Another consequence is the growing levels of income inequality in many industrialized countries, a trend which has begun in the last twenty or thirty years and is expected to continue¹³⁴.

This new social issue will become highly topical and urgent in the coming period. Although this social issue largely falls outside the scope of this study, we would urge that this it be put on the agenda for political and public debate ¹³⁵. It is also important that thorough research is done in the near future into the consequences of technological and economic change on people's ability to thrive and ways in which the Netherlands can maintain and modernize its high standards in the areas of employment and social security. In this context the Netherlands will need to work with other countries in the European Union that wish to maintain a social model.

3.5 Impact of technological trends on the production process

Technological developments have brought about major changes in the way in which economic development will take place in the future. This applies to the factors of both labour and capital. An important question, for example, is how the labour aspect will be organized in the future. How will a professional make productive use of his or her tacit knowledge in the future? And what type of employment relationship would be most appropriate? Another important question concerns the use and structure of the capital stock. What form will production processes take in the future? How will businesses deploy the capital stock and what reforms will be necessary for this?

Future employment relationships

The increasing importance of creative skills requires that people are educated differently than they are now. The fragmentation of production processes and the rise of the on-demand economy means that working relationships are

^{133 |} Roose (2014).

^{134 |} Piketty (2014).

^{135 |} See the study of the CDA Research Institute on the new boundaries (2015).

becoming increasingly more casual and flexible. The growing flexibilization of labour and the rapid rate of technological change also means that people will have to retrain more often. Converging technologies, i.e. the growing interconnectedness of IT, communications technology, production technology, energy and biotechnology, will demand more interdisciplinary cooperation within and between companies ¹³⁶.

Therefore it is necessary that more emphasis be placed in education on non-cognitive skills such as creativity, cooperation and communication skills¹³⁷. It is also important that labour organizations look for new forms of cooperation i.e. social innovation (see also chapter 2).

Future capital stock

The technological trends described above affect not only the factor of labour but also the capital stock. In specific terms, this is about organizing production processes in a different way. We note four transformations, which are: (1) incorporation of real-time information flows into the production process to make it more efficient and effective; (2) the use of high-tech applications which can transform materials in new ways; (3) the automation of the more routine parts of the production process and (4) technology solutions to tailor products to specific customer wishes ('customizing'). The combined impact of these production processes is such that the term disruptive production technologies is used¹³⁸. So what does this mean in relation to the organization of production processes?

The main disruption is that production processes are become more decentralized and cheaper. This development therefore requires a revaluation of capital goods. In real terms this means that capital goods which are suitable for mass production and use little energy and materials will decline in value, while capital goods which are unique products and use little energy and materials will increase in value. It also means that companies will have to invest in new production facilities in order not to fall behind other market players. Disruptive production technologies also reinforce the fragmentation and more horizontal organization of production chains, as referred to above, which will impact on where businesses choose to locate.

There are already various examples in industry of new ways of organizing production processes on the basis of technology. Examples include 3D printing, nano-technology and the Internet of Things (IOT)¹³⁹. This development is expected to continue in the future.

Finally, another important question is how ICT knowledge can be effectively applied to more and more facets of the production process. This has

^{136 |} Ministry of the Interior and Kingdom Relations (BZK, 2013).

^{137 |} Den Butter (2013).

^{138 |} National Intelligence Council (2013).

^{139 |} Fleisch (2010).

implications for the number and quality of ICT professionals trained, as well as the way in which production processes are set up.

How does the aspect of technological change relate to economic growth and the good life?

Technological changes require strengthening people's creativity and social skills and a restructuring of production processes.

3.6 Growing scarcity of natural resources

Partly as a result of the growing prosperity and the demographic trends outlined here, the demand for scarce natural resources in the period up until 2030 will greatly increase. The demand for food, water and energy is expected to increase by 35%, 40% and 50%, respectively¹⁴⁰.

While the demand for natural resources will rise, climate change will impose new restrictions on the supply of natural resources. Climate change will lead to more extreme weather conditions in which wet areas will become wetter and dry areas drier. The previously described urbanization will also increase pressure on the environment. The pressure on space and the environment is relatively high in urban areas. City dwellers also consume more and use more energy than the rural population, particularly in poorer countries 141.

There are also important challenges to be faced in the area of energy. The first and second industrial revolutions were largely based on new fuels, coal and oil, respectively¹⁴². It is expected that the power supply in the coming decade will come (indeed, will have to come) from renewables¹⁴³. This demands major investments in new energy infrastructure. Energy experts estimate that technological progress will bring about a sharp price reduction in the price of sustainable energy, especially solar energy, so that without government support these investments will disappear¹⁴⁴. A consequence of the energy transition is that the power supply in the future will be largely decentrally generated.

This change has major economic implications. Existing production methods will have to be transformed in the relatively short term into sustainable production methods. This will require greater business investment, particularly in manufacturing industry, aimed at both energy consumption and material use. The future scarcity of energy and natural resources will act as a a catalyst in these developments: businesses that can use energy and materials more effi-

^{140 |} Ibid.

^{141 |} Ministry of the Interior and Kingdom Relations (BZK, 2013).

^{142 |} Jacob & Jänicke (2009).

^{143 |} Bruggink et al. (2014).

^{144 |} Ibid.

ciently will have a competitive advantage when power and raw material prices rise in the future ¹⁴⁵. Many businesses, particularly in the chemicals and infrastructure sectors, currently appear to be not well prepared to deal with future shortages of raw materials ¹⁴⁶.

How does the aspect of sustainability relate to economic growth and the good life?

Sustainability creates opportunities for economic growth and is also a necessary condition for human growth in the long term.

3.7 Prospects for earning potential

The trends and developments set out in this chapter give rise to a sense of urgency, for at least two reasons. Firstly, because they are leading to major shifts in production structures with serious consequence for the workforce (i.e. the people) involved. Secondly, given the exponential nature of some technological developments the pace of change will continue to quicken. As technological developments follow one another at an ever increasing rate, it becomes all the more difficult to adapt to the new economic situation.

The urgency revealed by this chapter underlines the importance of the key areas that we identified earlier in this study, i.e. the importance of good institutions. In the following chapter we will therefore examine the impact of global developments on the Netherlands earning potential. What is the Netherlands' position now in relation to similar economies and what are the opportunities and obstacles to our future economic opportunities?

^{145 |} PBL (2013), chapter 1.

4 | Setting a strategy: opportunities and obstacles to the Netherlands' earning potential

Motto

'Concordia res parvae crescunt.'

Line from the Republic of the Seven United Netherlands 147

4.1 Introduction

The tectonic shifts and technological developments described in chapter 3 will lead to major changes in Dutch industry and commerce. This chapter will be devoted to examining the strengths and weaknesses of the Netherlands' earning potential from the point of view of tacit knowledge.

The growth of the Dutch economy was largely based on growth in productivity ¹⁴⁸. The Netherlands' starting position is good: its labour productivity is among the best six in the world ¹⁴⁹. There has been a downward trend in productivity growth since the 1980s, however ¹⁵⁰. This does not have to be a problem in itself given that productivity growth in the 1980s was extremely high and comparable countries have also seen a decline in productivity growth. The most important reference point is that the Netherlands can still keep up with the leading group of countries with the highest levels of productivity, referred to as the technological frontier ¹⁵¹, in which the US holds the leading position.

Since the Great Recession however, there have been doubts, specifically about the Netherlands' membership of the leading group. A study by the economist Laurence Ball showed that the Netherlands has suffered structural damage in terms of its national income, and that it is uncertain whether the Netherlands' national income will ever achieve the same level of trend growth again ¹⁵². This reservation was confirmed by the Netherlands Bureau for Economic Policy Analysis (CPB) which in a recent study expressed concern about the productivity gap with the US ¹⁵³. This gap has widened and it is questionable whether the Netherlands will ever be able to catch up with the technological frontier again.

The same applies to other European countries as well. This is problematic as calculations show that if productivity growth remains unchanged at the level for the period 1990-2006, by 2030 the Netherlands will be less able to bear the cost of the ageing population which would have an adverse impact on our living standards and for individual growth¹⁵⁴.

^{148 |} In the period 1995-2002 the growth in labour productivity was responsible for half the economic growth, and even three quarters of the growth in the period 2003-2008. Langenberg & Van den Bergen (2009).

^{149 |} Scientific Council for Government Policy (WRR, 2013), p. 192.

^{150 |} Netherlands Bureau for Economic Policy Analysis (CPB, 2014a).

^{151 |} The technological frontier is a constantly shifting ranking relating to research into new technological applications. Being on the technological frontier and remaining there is difficult, not least because of the vast amount of advanced basic knowledge required along with state-of-the-art research facilities.

^{152 |} Ball (2014).

¹⁵³ To quote the CPB: 'The level of Dutch labour productivity is high and followed the level of the United States until the onset of the crisis. Whereas productivity in the United States subsequently continued to grow, Dutch productivity is still below its 2007 level. A similar pattern is visible in the level of TFP.' Source: CPB (2014), chapter 4.

^{154 |} Storm, S. & R. Naastepad (2008).

In the following sections we will take a systematic look at the opportunities and obstacles to the Netherlands earning potential. We will do this by undertaking a critical analysis of the main sectors of the Dutch economy. We will then describe the current situation in terms of knowledge, skills and ambition, education and training, the labour market, sustainability, the housing market, government and the financial sector. As indicated in the introduction to chapter 3, we will conclude this chapter by setting out a strategy in which we provide an outline for the guiding principles which will be necessary to improve the future opportunities for Dutch goods and services to meet the changing global demands.

How does the aspect of the current economic situation relate to economic growth and the good life?

To be able to maintain our living standards in the medium term it is important that more impetus be given to the Netherlands' productivity growth.

4.2 Knowledge, skills and ambition

What is the level of the Netherlands' knowledge, skills and ambition? International comparative research indicates that in terms of knowledge and skills the Netherlands is ahead of other countries¹⁵⁵. Dutch research institutes, for example, are among the best and most productive in the world¹⁵⁶ and Dutch businesses are among the world's best in the area of discretionary learning in the workforce (learning in which the employee has a lot of freedom to choose his or her own path)¹⁵⁷. Partly due to the famous ability of the Dutch to improvise, Dutch businesses are more than capable of finding their way abroad; it is estimated that exports account for a third of the total employment in the Netherlands¹⁵⁸. On top of which the Netherlands also has several internationally competitive top sectors and regional clusters in which there is good cooperation between businesses, government bodies and research institutes.

Thus, there is no shortage in the Netherlands of innovative ideas or innovation potential. This is an important observation because politicians and policy-makers are inclined to make sweeping statements that 'we' are not innovative enough, or that 'we' do not invest enough in research and development. The question needs to be: in what specific part of the process of adding value could the Netherlands do more to move forward? In this process it is important

^{155 |} WRR (2008).

^{156 |} OECD (2012).

^{157 |} WRR (2013).

^{158 |} CBS (2014).

to make use of recent insights about the nature of innovation (see chapter 2) in which implicit knowledge, tacit knowledge, networks and institutions play an important part.

When we view the Netherlands in terms of this re-calibrated measure, then what becomes clear is that there are enough innovative ideas in the Netherlands, but that the Netherlands lags behind when it comes to turning innovative ideas into actual market opportunities. According to the Scientific Council for Government Policy (WRR) the Netherlands lags behind other countries particularly when it comes to a willingness to respond to market opportunities and the ambition to market these on a large scale¹⁵⁹. We see this also reflected in the Netherlands' relatively low scores in the areas of product and process innovation¹⁶⁰, and a relatively small number of young, rapidly growing businesses¹⁶¹. The percentage of innovative SMEs and the deployment of venture capital also lags behind in the Netherlands¹⁶². Finally, over the last ten years the level of business investment in the Netherlands has been remarkably low, which to a large extent goes hand in hand with the more sluggish development of entrepreneurial spirit in the Netherlands¹⁶³.

It is important to understand that the problem of a lack of willingness and ambition is not purely a technocratic issue which can be resolved through policy interventions on the part of government. As described in chapter 2, entrepreneurship is a cultural phenomenon which also depends on socially acceptable characteristics, such as exhibiting ambition, taking risks and breaking down resistance in society¹⁶⁴. The only role for government here is in creating the right conditions. The most important of these is education, where from an early age people can learn to tolerate differences and how to cope with mistakes¹⁶⁵.

Secondly, the issue of ambition also touches on a deeper matter, which is the previously mentioned opposition between creation and recreation. Entrepreneurship demands sacrifices from people in terms of time, energy and focus. Added to this, many people are consciously seeking to find a balance between their professional goals and having time over for rest, reflection and to meet people. In an economic and technological environment which is constantly changing, it is ever more difficult to maintain this balance and it is then necessary to make choices, such that – in light of the Christian Democratic view of human nature – the goal must be to develop the individual as a whole in all his or her facets.

^{159 |} WRR (2013), § 10.2.

^{160 |} OECD (2014).

^{161 |} Hoffmann, A.N. & M. Junge (2006).

¹⁶² OECD (2014), pp. 77-91.

^{163 |} EIM (2012).

^{164 |} Beugelsdijk (2007).

^{165 |} Thurik (2011).

How does the aspect of ambition relate to economic growth and the good life?

It is not the case that there is a lack of innovative ideas in the Netherlands, more a lack of willingness and ambition to introduce and market innovative ideas on a large scale.

4.3 Education

Learning has always been essential for human growth, in terms of spiritual, as well as social and economic development. The Netherlands was one of the first countries to make primary education compulsory, based on paternalist and religious grounds. This had a beneficial effect on both society and the economy.

Empirical research shows that Dutch youngsters and adults rank among the best countries in terms of skills, such that in terms of reading ability the Netherlands is among the best three countries, and in terms of numerical skills, among the top five 166. This reflects a strong underlying culture, a good education system and a good learning climate in organizations. At the same time we should not rest on our laurels, because as we noted in the previous chapters, economic development is rapidly changing in nature and there are also far-reaching technological shifts taking place which will require new forms of education and learning. We will elaborate on this important point in the next chapter.

We also see that although the Netherlands scores well in the areas of skills and discretionary learning, a sticking point is that compared with other countries the Netherlands lags behind in the area of life-long learning¹⁶⁷. We see this, for example, reflected in the relatively low level of participation in formal adult education. This is remarkable, because an in-depth study by the OECD indicated that more than a third of the Dutch working population says that there are no obstacles to them taking part in adult education¹⁶⁸. So here lies plenty of relatively unutilized potential for improvement. The low level of participation in adult education is a matter of some concern, because the technological developments mean that it is becoming increasingly important for the working population to continue learning throughout their career. Knowledge will more quickly become outdated, for example, and the rate of job destruction and creation over the last twenty years has only increased ¹⁶⁹.

^{166 |} OECD Skills Survey (2013).

¹⁶⁷ To quote the WRR: 'The Netherlands spends 0.4% of its GDP on training and education which is also partly paid for by the employer. This is less than in almost all comparable countries.' WRR (2013), p. 310.

^{168 |} OECD (2012), Policy Lever 1.

^{169 |} Ibid.

How does the aspect of education relate to economic growth and the good life?

A shift from cognitive to creative learning is required, along with improvements in the area of life-long learning.

4.4 Labour market

The 21st century will be the century in which the old line drawn between entrepreneur and employee will become increasingly blurred. Because in the 21st century everyone in work will be expected to take an entrepreneurial approach. It will also become increasingly common for working people to exercise their knowledge and skills for multiple organizations, e.g. on a freelance basis, possibly through various digital platforms.

This means that everyone in work will need to maintain and develop his or her knowledge and skills. As Ernst Hijmans, the Netherlands' first management consultant prophetically stated a century ago: 'Everywhere you see the same phenomenon, which is that if you look closely there is no such thing as unskilled work.' In short, all work demands knowledge and skills and that these are maintained, and all work brings to a varying extent, interaction and cooperation with others. This is a reality which is becoming more relevant by the day, because through technological and economic shifts professions quickly become subject to changes, which makes it all the more important that working people can properly determine what particular knowledge and skills are required in what place (e.g. through digital platforms, as described in chapter 3) and can quickly obtain the necessary expertise to be able to offer it.

Although in practice the roles of employee and self-employed are increasingly merging, the social security system still exhibits a rigid division between the facilities available for employees and those for the self-employed 170. This has led to a situation in which permanent forms of employment have become too permanent while flexible forms of working have become too flexible and insecure. This is damaging to both the economy and society, for various reasons.

Firstly, through the multiplicity of collective rules and arrangements central government has made employment for an indefinite period unattractive to the employer, even though long-standing relationships between labour and capital have demonstrable economic, social and cultural advantages¹⁷¹. People actively working for a longer period in the same work environment, for example, develop a common language which enables them to more clearly understand

^{170 |} See also Oudshoorn (2014).

^{171 |} See, for example, Volberda (2012).

the policy and procedures, and they become more efficient at work together resulting in less friction costs. Long term employment relationships also offer security, something which is important for working people to be able to start a family, for example.

Secondly, people are rational only to a limited extent which leads to an underestimation of risks, particularly where these may be large and abstract in nature. This applies to the risk of complete work disability, for example. Thirdly, the gap between permanent and flexible contracts will ultimately make social security unaffordable ¹⁷².

How does the aspect of labour relations relate to economic growth and the good life?

The major gap between permanent and flexible forms of employment are damaging to both the economy and society.

The point concerning the importance of good relations between labour and capital needs to be further underlined. It is important that labour is flexible to a certain extent, because changing employment relationships will mean that working people have to invest more in their skills and because the allocation of labour changes over the course of time. However, when employment relationships become too flexible, this has more of a negative effect on labour productivity, because excess flexibility has the effect of reducing investment in specific skills¹⁷³. In view of the insights on adaptivity and stability described in chapter 2, it is therefore important that the Netherlands maintains a good balance between permanent and flexible labour and does not swing too far towards one or other of the extremes.

Labour costs in the Netherlands are relatively high¹⁷⁴. This is partly because the taxes, contributions and other obligations associated with permanent employment contracts in the Netherlands are high, as a result of which employers, particularly SMEs, are increasingly less inclined to employ people for an indefinite period. The high level of taxation on labour also has a demotivating effect on the willingness of working people to invest in professional growth. Because they only get to keep a small (and ever declining) share of the extra earnings that this yields.

Finally, given the previous observations about the nature of innovation, increasingly rapid economic shifts and technology convergences, the present structure of separate sector-based training funds does not benefit labour mobil-

^{172 |} FD 23-10-2014.

^{173 |} Heyma and Theeuwes.

^{174 |} Van der Ploeg & Vermeend (2014).

ity between sectors, while cross-sector mobility is likely to become increasingly important¹⁷⁵. Although greater cross-sector mobility will be difficult to achieve given that growing competition on the global market means that people must specialize in ever more narrow fields, making it more difficult to switch to another sector. This underlines how important it is for people to have good communication and cooperation skills.

How does the aspect of the labour market relate to economic growth and the good life?

The high labour costs in general and the high level of taxation on labour in particular constitute an obstacle to entering into long-term employment relationships and professional growth.

4.5 Sustainability

As described in chapter 3, as a result of climate change and the growing scarcity of natural resources it may become necessary to make the economy more sustainable. This necessity however is also an opportunity, i.e. an opportunity to develop a green industry ¹⁷⁶. The Netherlands' agriculture and horticulture, along with the chemicals and materials sector, together account for half the Netherlands' industry and are promising sectors for creating a sustainable economy and are also moving increasingly towards one another ¹⁷⁷. However the Netherlands needs to get on with capitalizing on these opportunities, because other countries are further than the Netherlands in making their economies more sustainable ¹⁷⁸.

What are the problems when it comes to making the Netherlands earning potential more sustainable? The Netherlands Environmental Assessment Agency (PBL) points out that the Netherlands needs to take two steps. Firstly, companies which are green and innovative but not highly competitive internationally need to adopt an internationalization strategy¹⁷⁹. Secondly, businesses which are highly competitive internationally but do not yet have a sustainable production process in place, need to adopt a green innovation strategy. One particular obstacle to green innovation policy mentioned by business owners concern the instability of the Netherlands' sustainability policy¹⁸⁰. In addition,

^{175 |} Wilthagen et al. (2014).

^{176 |} Bruggink et al. (2014).

^{177 |} Ibid.

¹⁷⁸ PBL (2013), chapter 5.

^{179 |} PBL (2013), chapter 4.

^{180 |} Ibid.

companies run up against detailed government regulations and financing problems (see also section 4.8 below).

4.6 Housing market

In the long term, a properly functioning housing market is important for the earning potential of the Netherlands. Firstly, housing is an important requirement for people to thrive because, as described in chapter 1, people need a home, a private domain where we can express our own desires. A home also provides a base from which people can together give shape to the good life. Secondly, homes are important for people's capital accumulation. The housing stock, for example, represents around 37% of the gross capital of Dutch households¹⁸¹. Thirdly, the housing market is important for employment since the construction industry contributes about 5% to GDP¹⁸².

As indicated in a recent study of the CDA Research Institute¹⁸³, for years there has been stagnation of the housing market as reflected by the lack of movement on the housing ladder, price deflation, the downturn in new housing developments, financial problems in the housing association sector and a qualitative mismatch on the housing market.

Another problem in the Dutch housing market concerns subsidized housing (skewed income to rent ratio): people living in a public sector housing association property while on the basis of their income they could also afford to rent or buy in the private sector. As a result of this the housing association sector is kept artificially large, which brings unnecessary costs to society. In the housing association sector, for example, there is considerable unutilized potential to improve effectivenes¹⁸⁴, while recent scandals have undermined public faith in the sector. The problem of subsidized housing (skewed income to rent ratio) and the artificially large housing association sector is being maintained or even worsened by the qualitative mismatch on the housing market itself. There are relatively too few affordable houses (also to rent) for starters, for example, and too few suitable and affordable properties for the elderly.

How does the aspect of the housing market relate to economic growth and the good life?

The stagnation of the Dutch housing market is damaging to the nation's earning potential.

^{181 |} CPB (2014e).

^{182 |} CBS (2013).

^{183 |} De woningmarkt in beweging II [The housing market on the move II], 2012.

^{184 |} Veenstra et al. (2013).

4.7 Government

Certainly in comparison to other countries, the Netherlands government functions properly and also has an excellent record when it comes to long-term thinking and turning this into policy, also compared with governments in other countries¹⁸⁵. This is reflected not only in the continuity and quality of our public services, but also in the soundness of government finance for the long term. In a recent study of the Netherlands' government finances, for example, the Netherlands Bureau for Economic Policy Analysis (CPB) – one of the Netherlands' forward-looking institutes – observed that concerns about the impact of the ageing population were less acute than had been assumed in previous studies¹⁸⁶. This is partly as a result of the changes in the age at which people become eligible for a state pension (AOW) with reforms to long-term and other care, as well as work disability schemes.

The good basic position of the Dutch government, however, does not mean that we can lean back, on the contrary. As described in chapter 3, the Dutch economy has suffered structural damage as a result of the Great Recession, such that it is uncertain whether the Netherlands can again resume its old pattern of growth in the future¹⁸⁷. The Great Recession has meant that the size of the government as a percentage of national income has also risen. From a Christian Democratic viewpoint it is not desirable for the government to lay too great a claim on national income, because this narrows the room for initiatives from society – initiatives that come from companies and individuals¹⁸⁸.

Size of government

What is the size of the government in the Netherlands and how has it evolved? At the moment the Netherlands' collective spending quotient is 50%. This means that the government spends around 50% of the GDP¹⁸⁹. Collective spending is largely financed from tax and national insurance contributions and partly from other revenues, such as gas revenues. This represents an increase of about 4% relative to the situation before the financial crisis of 2008. The reasons for the greater government claim on the national income are understandable and in the short term do not constitutes a serious problem. However, this situation is undesirable in the longer term, not least because of the rising collective tax burden.

^{185 |} Dreyer and Stang (2013).

^{186 |} CPB (2014b).

^{187 |} Ball (2014).

^{188 |} See the first principle of Sybrand Buma: society, not government.

^{189 |} CPB (2014c).

As a result of the rise in the collective spending quotient the collective tax burden in recent years has risen from 38.9% in 2010 to 41.3% in 2015¹⁹⁰. In combination with a shift in the burden of taxation, this has resulted in the previously discussed relatively high tax burden on labour, which in turn acts as a barrier to both private initiative and initiatives from society. High collective taxes also prevent people from spending less time working and taking more time for rest or to meet people.

Added to this, even if government spending were to remain the same, in the medium term the collective tax burden would rise as the gas revenues slowly but surely dry up. In recent years the gas revenues amounted to around 5% of the total government revenue¹⁹¹. If gas revenues were to fall and collective spending remains the same, the collective tax burden would have to rise even more, thereby further reducing the room for initiatives from society and private individuals. This shows that the Netherlands has a major challenge to deal with in the future concerning government finances.

Essentially, it is important that government spending is reduced to the level it was at before the Great Recession and the Netherlands collective spending quota again keeps pace with Germany, where there has been considerably less growth in the public sector¹⁹². In Germany, for example, the collective spending at this point in time amounts to around 45% of its GDP.

How does the aspect of government relate to economic growth and the good life?

The Dutch government makes an important contribution to the quality of life. To be able to maintain this in the future, it is important that in due course the size of the public sector should be reduced to the same level as in Germany.

4.8 Financial sector

The relatively good economic growth in the Dutch economy in the years prior to the Great Recession, as in other developed economies, rested fairly heavily on the property sector and the financial sector. Both these forms of growth are not sustainable, and thus the crisis itself and the period immediately following it were painful for the Netherlands. Despite the relatively large size of the financial sector, there are indications that the extending of credit to businesses in

^{190 |} Source: CPB (2014c).

^{191 |} Budget Memorandum (2014).

^{192 |} Beetsma & Gradus (2013).

the Netherlands is not in order, a matter which adversely affects mainly SMEs – that have few alternative sources of finance¹⁹³.

A possible reason for this is that further to the financial crisis the Dutch banks are pre-occupied with their own re-capitalization¹⁹⁴. This means that banks are using capital resources that are released to strengthen their balance sheet position - partly because of the stricter capital requirements which have been imposed on banks in many countries – which then has to be implemented at the expense of their lending to businesses and other financing activities.

There are also indications that there is too little competition in the Dutch banking sector, particularly in the consumer market, including the mortgage lending market¹⁹⁵. One of the reasons for this is that the barriers to entering the banking sector are relatively high, mainly due to complex financial regulations¹⁹⁶.

A more fundamental problem is the financial structure of the Netherlands. In the Netherlands for a long time debt has had a tax benefit compared with equity. An example is the tax deductibility of interest on debt which applies to both businesses, which can deduct the interest from tax before profit, as well as private individuals who can deduct the mortgage interest from their income tax. This prevents long-term thinking and also does not promote prudence.

A second fundamental problem in the financial sector concerns professional ethics. Even years after the financial crisis it appears from various incidents, both small and large, that the financial institutions still do not take their obligations and the duty of care towards their clients seriously enough. An example of this concerns the way in which banks approach the selling and settlement of complex financial products; a court of law recently ruled that banks had acted with insufficient care in this matter 197.

How does the aspect of the financial sector relate to economic growth and the good life?

The financial sector is in need of reform. Attracting equity should be made just as fiscally attractive as borrowing capital.

^{193 |} World Economic Forum (2014).

^{194 |} CPB (2014d).

^{195 |} Dijkstra & Schinkel (2012).

^{196 |} ACM (2014).

^{197 |} See court decision ECLI:NL:GHSHE:2014:1052, which can be found at: http://www.rechtspraak.nl/Organisatie/Gerechtshoven/s-Hertogenbosch/Nieuws/Pages/Banken-hebben-bijzondere-zorgplicht-bij-aanbieden-renteswaps.aspx 198 [in Dutch only].

4.9 Prospects for earning potential

In the foregoing sections we have identified the strengths and weaknesses of the Netherlands earning potential. The key message of this chapter is that there are plenty of opportunities for Dutch businesses in the coming decades. The Netherlands has more than enough innovative ability to be able to respond to these developments. At the same time the willingness seize opportunities (i.e. to take risks) and the desire to market innovations on a large scale is less in the Netherlands than in other countries¹⁹⁸.On top of which there are various obstacles to the benchmarking of tacit knowledge. There are various things lacking in the economy, but no lack of challenges available for the Netherlands earning potential!

It is therefore important to have a well thought out strategy for the main purpose and central theme of this study, i.e. promoting human growth and development in harmony with economic growth and development. Devising a strategy is more difficult than identifying opportunities and obstacles for two reasons. First of all, formulating a strategy is a shooting at a moving target: selecting and implementing policy takes place on the basis of a snapshot and takes time, while global demands are constantly shifting. Secondly, devising a strategy is a matter of setting priorities: it is not possible to implement many policy measures all at once, therefore it is necessary to look at those policy options which offer the best combination of the tacit knowledge found in the Netherlands and the changing global needs.

This means that a strategy needs to be devised that rests on adaptivity or guiding principles, on the one hand, and is value-driven, on the other. It is therefore important that the Dutch strategy on earning potential has a specifically Christian Democratic flavour to it. In this section we will set out the direction for this strategy; in the next chapter this will be further expanded upon with specific policy recommendations.

We would also like to point out that – bearing in mind the notions described in chapter 2 that economic development is an unpredictable process and that society is not something that can be made – there must be sufficient room provided for adaptivity when strategy and policy recommendations are formulated.

This means that we must aim to incorporate the guiding principles in such a way that they are concrete enough to be able to steer policy while also being flexible enough to be able to respond to unexpected circumstances¹⁹⁹.

¹⁹⁸ IWRR (2008), p. 82.

^{199 |} There are also good economic arguments for this point of view. Various studies have shown, for example, that policy-makers are not good in picking 'winners' and that it is better for them to focus on creating the right conditions. See, for example, Rodrik (2007).

Underlying values

We will start with the underlying values which will provide the starting point for the Dutch strategy. The most important of these were given in chapter 1 where we concluded that the structure of the economy should be evaluated not just in terms of prosperity and material progress, but also in terms of people's ability to thrive, the quality of work and the impact of the economy on the environment. An important question in this context is: do we need economic growth and if so, how do we define that?

The answer to the first question is that economic growth is unquestionably necessary, because economic growth provides the foundation for employment and because meaningful work in turn underpins people's ability to grow and thrive. People suffer greatly from unemployment, while meaningful work to a large extent contributes to their sense of well-being. This immediately gives rise to an important condition for economic growth which is that from the Christian Democratic viewpoint growth should be balanced and should contribute to employment. The phenomenon of jobless growth, therefore needs to be prevented as far as possible. Another important condition is that while economic growth is to an important extent based on ever greater specialization, as indicated in chapter 2, this should not lead to people becoming alienated from their work. There is constant pull in opposite directions: something which policy-makers need to take into account. A third condition is that economic growth may not be at the expense of future generations which, among other things, implies that we must manage our natural resources carefully.

Possible strategies

Next we will consider some possible strategies for the Netherlands. In a world where technological change is the most important permanent game changer, we envisage two possible strategies. The first of these is to be the best or most respected in the game that is being played. This could also be called the 'German' strategy, given the economic success enjoyed by Germany in numerous high-tech value chains and in view of Germany's pioneering role for many decades now in the introduction of incremental technical improvements to products and production processes based on investment in research and development. The second strategy is to ensure that, as a country, you are also a co-contributor to the rules of the game.

This strategy could be called the creative strategy. This strategy involves getting in on the ground floor of products and services and thus acquiring a position in various value chains.

The Netherlands is best placed to pursue the creative strategy.

An important argument for this statement is the nature of Dutch culture and the influence of culture on the economic opportunities open to a country, i.e. the argument of path-dependency²⁰⁰. As shown in chapter 2, the Dutch culture is particularly suited to cooperation and the critical refinement of ideas. These are crucial elements in the creation of new concepts and products. Added to this, the creative class is on the rise in the Netherlands which will increase the Netherlands chances of successfully pursuing a creative strategy²⁰¹. The Netherlands also has very wide spectrum of high-tech knowledge available on the basis of which - through cooperation - new combinations can be developed - certainly given the size of the Dutch economy. Finally, from an international point of view, the Dutch economy is not large enough to dominate entire commercial sectors, either with or without large-scale investment. This means that the Netherlands role is to find new niches, an activity which requires a high degree of creativity.

In the next chapter we will look at this strategy more closely based on the key themes set out in previous chapters of this report.

^{200 |} See chapter 2. For a more detailed theoretical description: North (1992). 201 | Aalst et al. (2006).

Folicy
recommendations:
five guiding
principles for
economic growth
serving the good life

Motto

The motto for policy measures is: simple and decentralized.

5.1 Introduction

In the previous chapter we described how global trends and developments impact on the Dutch economy. We also reached the conclusion that the Netherlands needs a creative strategy to be able to respond effectively to these developments. In this chapter we will further expand on this strategy based on some specific policy measures for the medium term – up until 2025. In doing so we will build on the key themes elucidated in this study while striking a balance between realism in terms of the identified opportunities and obstacles to the Netherlands earning potential, and idealism in relation to the Christian Democratic principles set out in chapter 1.

Given that formulating a strategy is essentially shooting as a moving target and involves setting priorities, in this chapter we will not provide a static list of policy measures but couch the policy recommendations in a set of guiding principles based on the recurring themes in this report. Each of these guiding principles describes a change of direction which responds to the global trends and developments while also taking into account the ways in which human growth can be combined with economic development.

What are the principal themes running through this report and what guiding principles do they imply? The first of these is creativity; therefore learning to be creative is the first guiding principle. Ambition and entrepreneurial spirit is the second key theme; therefore appreciative employment relationships constitutes the second guiding principle. The human drive to provide quality in combination with sustainability is the third theme, and therefore qualitative growth is the third guiding principle. At a slightly higher level of abstraction, cooperative alliances and culture are another theme; therefore entrepreneurial ecosystems are the fourth guiding principle. Institutions is another key theme; therefore the focus on the longer terms constitutes the fifth and final guiding principle, one in which government has an important role to play.

Another particular theme as a whole, from which no guiding principle has been derived, is recreation. This theme of course refers to the ultimate purpose of economic activity, and that is the good life. We conclude this report therefore with a final chapter in which all these themes are brought together with a clear description of the role of the economy in society.

We will expand on each of the guiding principles identified by showing the shift to be made for each guiding principle, proposing specific policy measures in order to facilitate this shift, and to assess these measures on the basis of the underlying vision set out in this study.

5.2 Creative learning

The shift to be made

The general purpose of the measures in this section is to enable the shift to be made from cognitive learning to creative learning. This shift fits in well with the Christian Democratic view of human nature, on the one hand, and is also necessary given the global developments, not least because activities of a routine nature are becoming increasingly automated, on the other. The switch to creative learning is more specifically a qualitative shift, which cannot be brought about in a technocratic manner, but requires openings in the education system. Learning, after all, is neither purely a formal undertaking nor an informal one, but more specifically takes place in the interaction between disciplines, between theory and practice, between the new and the existing, and between student and teacher.

Openings are necessary at three levels: on the demand side of education, on the supply side of education and, most of all, in the education methods. We will elaborate on the various topics here below. We will consider the topic of craftsmanship separately in section 5.4. Given its importance we recommend that an in-depth study be carried out on how education should be structured in the future, not least because in the Netherlands there are not only socio-economic changes taking place but also socio-cultural changes.

How does the shift towards creative learning relate to economic growth and the good life?

The main idea for this guiding principle is:

• Creative learning requires different education methods in which the emphasis lies on basic knowledge, non-cognitive skills and learning to cope with making mistakes.

The other measures in this section include:

- Creative learning requires the introduction of a system of learning rights.
- This learning rights system needs to be combined with an open system for MBO (senior secondary vocational education), HBO (higher professional education) and WO (academic higher education) which also provides room for new entrants.
- Creative learning further requires reducing the number of initial education courses and increasing the opportunities for modular education.
- Additional measures will be needed to eradicate the expected shortage in the number of highly trained ICT specialists.

Changing education methods

In chapter 2 we observed that the nature of economic development – and innovation as the driving force behind this – has changed substantially. While in the past looking for new products and production methods was something which could be managed, e.g. in R&D departments of large companies, it is quickly becoming clear that innovation can no longer be seen as an isolated and steerable process. There is, after all, a growing degree of specialization, digitalization and rapid technological development, trends which are making the entire innovation process much more diffuse.

Innovation in the 21st century can better be described in terms of the cross-fertilization of ideas in a somewhat spontaneous manner. This implies that the learning process behind the creation of new added value has fundamentally changed. Creative learning is the term we have used to summarize the new way of learning that this requires and which needs to be incorporated in the education system. There are three important ingredients for creative learning, which are: basic knowledge, the development of non-cognitive skills and learning how to deal with making mistakes.

The first ingredient for creative learning would at first sight seem to be paradoxical. Is it not better for creativity to as little hindered as possible by previously acquired knowledge? Although it is indeed important for creativity to be able to think freely (see the third ingredient), empirical research shows that basic knowledge properly grounded in our long term memories is vital to creativity²⁰². The reasons for this are intuitively understandable, given that creativity is essentially the combining of two or more existing ideas. The more existing ideas that a person holds and the greater that these ideas are, the more creativity is possible. It is fairly logical therefore that the mother of the Greek muses – the goddesses of art and science representing all forms of creativity – was the goddess of memory²⁰³. In summary, acquiring a basic level of knowledge remains a necessary pre-requisite for a good education.

The cross-fertilization of ideas implies interaction between people, which in turn requires strengthening non-cognitive skills in education, the second ingredient for the change in education methods.

Non-cognitive skills refers to creativity, cooperation and communication skills. The difference compared with cognitive skills can be explained as follows: with cognitive skills the emphasis lies on reproducing solutions, while with non-cognitive skills the emphasis is on creating solutions²⁰⁴.

Fundamental changes in the Dutch education curricula will be necessary in this area, changes which are already being made in various teacher training courses and which deserve strong support for their further dissemination.

^{202 |} Feldhusen (2011).

²⁰³ The mother of the muses was Mnemosyne. Her nine daughters, the muses, were fathered by Zeus in nine nights.

Examples might include introducing combinations of existing subjects in project-based education or didactic forms which require more cooperation through working together in teams. The introduction of information and communication as a mandatory basic subject in secondary education and IT as a voluntary additional subject in the upper school in secondary education might also be options²⁰⁵. Putting more emphasis on creative learning should apply not only to the more highly educated, on the contrary. Creativity is necessary at all levels. Non-cognitive skills should be more appreciated also in lower and preparatory education as well as in vocational education.

The third ingredient to creative learning is learning to accept and deal with making mistakes. Because the process of innovation is no longer something which can be managed, it is necessary for people to dare to experiment and that mistakes are not seen as a personal failure but more as an opportunity to learn. This creates self-confidence which should be built up from an early age. This point is currently at odds with the present performance culture that prevails in education. By placing too much emphasis on performance, the self-confidence of young people, in particular, can be dented, as a result of which they become afraid of making mistakes. In education this means that there needs to be sufficient room for playful forms of learning. This is essential for human development and therefore indirectly also for economic growth in the medium to long term.

An important comment that should be made concerning the advocated change in the education system is that a different teaching method does not mean that education should be made to serve the economy (i.e. the knowledge economy), on the contrary.

Argued from the Christian Democratic point of view the purpose of education is the development of a person in all his or her facets, education that enables the person as a whole to flourish. Education therefore not only gives people job-related knowledge and skills but also attempts to give people some cultural development, as well as something in the moral, social, physical, creative and spiritual areas of life.²⁰⁶

Although focusing on cultural development in education need not stand in the way of economic development. Rather cultural development could even become more important for future economic development than learning knowledge and skills, albeit in an indirect manner. This is because creativity is not a something which can be learned in a rational or standard way. Creativity is an Art, with a capital A, and the wider the frame of reference that people have - in the areas of art, religion, philosophy and history, for example - the greater their creative faculties will be. Essentially, if we want to strengthen people's develop-

^{205 |} MKB Nederland (2015).

ment and economic growth in harmony with one another, then we would do well in the Netherlands to allow sufficient room in the education system for cultural development.

Learning rights and open system

Besides changes in education methods, changes will also be necessary in the way in which we organize education and use education during a person's lifetime. Rapid technological changes mean that people will have to constantly adapt their level of skills. As observed in the analysis of the Netherlands earning potential, the Netherlands scores well in the area of informal learning – learning at the workplace – but lags behind when it comes to taking part in formal adult education.

A system of learning rights would be a good way to encourage employees to invest throughout the course of their career in their own knowledge and skills. Under this system all Dutch citizens of working age would receive vouchers which they can exchange for hours of training and education. A vital aspect of this system is that learning rights which have not been fully used up could be used flexibly at a later date²⁰⁷.

It must be possible for the learning rights to be freely used at all accredited education institutes, to ensure that adequate quality is maintained through competition. The learning rights system should apply not only to post-initial education but also to initial education. We therefore suggest that it should be investigated whether the present Dutch secondary education system (vocational training and higher education) can be turned into an open system that provides room for new entrants, under the quality standards which apply, of course.

The introduction of a learning rights system would require additional investment of government funding. This would be a good investment, however, given that it will strengthen the Netherlands knowledge infrastructure which is important for both human development as well as economic growth in the medium to long term. This will, for example, make people more widely deployable and increase their resilience.

The learning rights system will also mean that people will be less dependent on their income situation or possible employer in making their decisions about retraining or extra training, which will enable them to take responsibility for their own development. A learning rights system would also enable the additional educational resources required for this to be provided on the basis of demand and thus ensure that this investment is wisely spent.

To make sure that people actually make use of the learning rights system and to encourage people to make training decisions which are good for their longer term prospects, the number of courses where refresher training

^{207 |} For further details see the CDA Research Institute report 'Investeren in participeren' [Investing in Participation] (2006) [in Dutch].

becomes mandatory after a period of time, should be increased. At the same time the refresher training requirements should be set up in a flexible manner so that new academic and practical insights can quickly be incorporated into the training and education courses.

Modular education

Openings are necessary in both course content and teaching methods. The myriad of initial courses should be reduced to a more manageable number of courses of a more general nature. Partly as a result of the learning rights and open system described above, education will need to be organized on a more modular basis. This means that courses will be subdivided into smaller units, modules, which can also be studied and certified individually. Modular education will enable people to pursue a more flexible form of education and combine various courses of study. It should be possible to make visible the skills which employees have already to some extent acquired in practice through fast track modules, to improve the opportunities for older employees, for example, to move on in the labour market. It is also important that there is close coordination with the existing system for recognizing existing competences (the EVC procedure).

ICT training

As a result of digitalization ICT expertise will become increasingly incorporated into ever more facets of the production process. It will be necessary to ensure that there are sufficient numbers of well trained ICT specialists available for this. The Employee Insurance Administration Agency (UWV), however, anticipates that there will be a shortage of highly qualified ICT specialists in the short to medium term²⁰⁸.

Additional measures will be required to tackle this shortage, e.g. by attracting more school-leavers or retraining people who are unemployed.

5.3 Appreciative employment relationships

The shift to be made

Technical innovation in organizations leads to new knowledge creation and ideas for product innovation, but the new knowledge and ideas should ultimately be turned into the successful introduction of new products and services. This requires appreciative employment relationships, which means: employment relationships which encourage the workforce to come up with and

208 | Employee Insurance Administration Agency (UWV, 2014).

embrace new ideas and where necessary take risks, without being overly concerned about the adverse consequences of taking risks.

Appreciative employment relationships requires ambition, a pro-active approach and a trusted social safety net. Given the global developments outlined here, this social safety net has come under threat, along with the enduring nature of employment relationships. Various problems in the Dutch labour market were also described in chapter 4. We will therefore make some suggestions for reforming the social security system, seeking a balance between security, which is important for people to be able to thrive, and flexibility, which is important for economic growth. The most important reform we would like to propose is the introduction of a basic insurance for working people. We will expand on these measure here below.

How does the shift towards appreciative employment relationships relate to economic growth and the good life?

The main idea for this guiding principle is:

• Appreciative employment relationships require social security reform in the form of a basic insurance for everyone in work.

The other measures in this section include:

- Unemployment benefit (WW) should be available for a shorter period than the present benefit but provide more money.
- The duration and amount of continued salary payment in the event of sickness or work disability should be reduced for SMEs with fewer than 25 employees.
- Ambition can be enhanced by reducing the taxation on labour, promoting profit sharing and improving the position of older employees on the labour market.
- We recommend that the role and position of the labour inspectorate be strengthened and that sanctions on the abuse of economic power at the expense of working people or the self-employed be made more severe.

Basic insurance for working people

The analysis in chapter 4 showed that there are various reasons why the rigid division in the social security system between arrangements for people who are employed and those for the self-employed are damaging to both the economy and society. Employee insurance schemes are therefore in need of reform, specifically in the form of a basic insurance for all working people.

The basic insurance must be kept as compact as possible, so that the advantages of being an entrepreneur are maintained while the cost of employ-

ing personnel is greatly reduced. The basic insurance for working people should therefore only cover the risk of complete work disability (the Full Invalidity Benefit Regulations (IVA) area of the present Work and Income (Capacity for Work) Act (WIA)). The risk of partial work disability (the Return to Work (Partially Disabled Persons) Regulations section of the present Work and Income (Capacity for Work) Act (WIA) would no longer be covered collectively but should only be provided for on the basis of individual choice on the part of working people. This otherwise applies only to the risk of up to 80% work disability, like the IVA, the risk of 80-100% work disability should be included in the basic insurance for working people.

Supplementary pension should remain outside the basic insurance, because there is already a basic pension in the form of the state pension (AOW) and working people should also be able to make their own collective pension arrangements²⁰⁹. The unemployment insurance for employees should also not be part of the new basic insurance, based on the previous argument for keeping the basic insurance as compact as possible and because people can also take on a considerable portion of the risk of unemployment themselves through saving, while in the case of work disability this is considerably more difficult.

Changing the duration and amount of unemployment benefits

Unemployment benefit (WW) should also be available for a shorter period than the present benefit and the amount of benefit should be increased²¹⁰. The shorter duration of the unemployment benefit will encourage people to find work again as quickly as possible. This is important, because the longer someone is out of the work rhythm the more difficult it is for them to get back into it again. The increased amount of the unemployment benefit will ensure that in the intervening period the socio-economic security of job seekers is better than it is under the present benefit system, so that family life does not have to be disrupted and the job seeker's full attention can be devoted to finding a new job.

Changing the system of continued salary payment in the event of sickness
Finally, the period in which salary must continue to be paid during sickness
is too long, which discourages employers from taking on personnel, particularly people with a history. Continued salary payment in the event of sickness
has a inhibitive effect, particularly for SMEs, because the risk is too great for
small companies to bear²¹¹. Although continued salary payment in the event of
sickness does provide an effective incentive to ensure that working conditions

^{209 |} See the recent report of the CDA Research Institute 'Naar een solide en solidair pensioenstelsel' [Towards a solid and solidary pension system] [in Dutch], 2014.

^{210 |} This is in line with the 'Kiezen en verbinden' [Choice and loyalty] report on this subject [in Dutch]. See CDA Advisory Board (2012).

²¹¹ I MKB Nederland (2008), chapter 3.

are healthy and safe. In essence, a fine balance has to be struck between the growth opportunities for businesses, small and large, and the long term protection of employees.

This balance can be recovered by shortening the duration and amount of continued salary payment in the event of sickness for SMEs with a workforce of fewer than 25 people. This will help to reduce the barrier preventing employers from taking on personnel which ultimately will benefit job creation and long term relationships between employers and employees. This will offer prospects for people who are now left on the sidelines or have to work under many short and constantly changing contracts and will therefore be good for people's development. With the introduction of this measure it will have to be determined how arbitration effects can be prevented.

On balance, the above social security measures will mean that government will be less involved in the decision to use employed in house or contracted flexible labour, indefinite period employment relationships will be less heavily taxed and flexible employment relationships will offer a minimum standard of security.

Releasing ambition and entrepreneurial spirit

It is important that all working people, whether they are employed or self-employed, feel responsible for their own knowledge and skills and make it their personal goal to raise the standard of their knowledge and skills. This idea fits in well with the learning rights system described above. In addition to this, it is important that ambition be rewarded. As described in chapter 1, the rewards for ambition are largely immaterial: people enjoy being good at what they do. Nevertheless, it is important that ambition should also be rewarded in material terms, all the more because in the 21st century labour will increasingly have to compete with technology (e.g. robots and automation). The tax on labour must be reduced, so that people who take that extra step forward can enjoy the fruits of their efforts. This reduction should be coupled with the introduction of a social flat tax system²¹², so that ambition is rewarded at all levels (fiscal plans are further described in section 5.5).

Ambition in organizations

Ambition and a sense of responsibility among working people can be further stimulated in organizations, e.g. by encouraging profit sharing in organizations. This will make it easier for working people to become joint capital owners and thus accept more responsibility and risk, as well as share in the benefits of this.

^{212 |} For further details see the CDA Research Institute report 'Een sociale vlaktaks' [A social flat tax] [in Dutch] (2009).

Profit sharing would also mean that fixed salary could be lowered in favour of the flexible part of the salary, making businesses more resilient financially. Although this form of organization is not suitable for every organization. Employees represented in works councils and trade unions must therefore also be able to retain the possibility of receiving a full fixed salary.

Another recommendation in terms of business organization is to make it easier to develop spin-offs from larger businesses. These are small innovative companies that are started from within a larger organization. This could take the form of a return guarantee in the event that the innovation fails²¹³. This will help to reduce the uncertainty for the employee who thinks of the idea thereby giving the employee more encouragement to carry out the idea.

Position of older employees

Ambition is not solely the preserve of young working people, on the contrary. Based on their experience, older working people can also increase added value, something which the present state of labour relations makes unnecessarily difficult. The generous employment terms for older employees constitutes a barrier, as does discrimination against older people on the labour market. The position of older employees on the labour market therefore needs to be improved²¹⁴.

There are two roads that will lead to the desired improvements. On the one hand, it will be necessary to ensure that employment terms for older employees are in line with those for other staff, so that employers no longer have a financial reason for refusing to employ older people. Employers and employees will therefore have to reach agreements to bring the employment terms of older staff into line with those of other employees and to enable demotion. The government must support this development by abolishing the reduction in working hours scheme (ADV). On the other hand, the knowledge and experience of older staff needs to be better utilized in organizations, e.g. by introducing the master/apprentice principle in which older employees coach younger people in their work. Older employees can also have an important role to play in fostering craftsmanship (see section 5.4).

Social issue

It is described in chapter 3 how flexible employment – facilitated and speeded up by the development of digital platforms as part of the on-demand economy – has undermined the negotiating position of a large group of more vulnerable working people, which has led to an erosion of employment conditions and

^{213 |} WRR (2008).

^{214 |} Bovenberg (2013).

even payment of less than the minimum wage. This obstructs people's development and ability to thrive.

It will take time to find an answer to this new social issue. We recommend that the role and position of the labour inspectorate be strengthened and that sanctions on the abuse of economic power at the expense of employees or the self-employed be made more severe. The business community also has a responsibility, e.g. by introducing a code of socially responsible market ethics as already exists for some facility services²¹⁵. We would further recommend that an in-depth multidisciplinary national study be carried out on the reasons and background to this social issue.

5.4 Qualitative growth

The shift to be made

The overall purpose of the measures in this section is to make a shift towards qualitative growth. Qualitative growth refers to changes in the structure of the economy which are intended to do justice to the individual in all his or her facets. Instead of creating more products and services, the emphasis is placed on creating better quality products and services. This does not stand in the way of economic growth, but is more of a fundamental shift in the direction of a different economic model.

Focusing on qualitative growth responds to two tectonic shifts, i.e. the shift in the direction of an economy more concerned with welfare and the growing scarcity of natural resources. It also fits in with people's desire to provide well crafted work. A focus on quality will also enable the Netherlands to operate in higher market segments and become more competitive. Finally, the focus on quality will lead people to improve their knowledge and skills. Working to provide quality makes people proud of their profession, at all levels of society, which has a positive effect on human growth and development.

How will the shift towards qualitative growth affect economic growth and the good life?

The main idea for this guiding principle is:

 Craftsmanship and excellence requires an impetus, in education and in companies.

The other measures in this section include:

 More repairs of existing products will lead to less use of scarce raw materials and more employment for less highly educated skilled manual workers.

215 | General Employers' Association (AWVN, 2015).

- Qualitative growth requires a change in patterns of consumption, a transformation that can be facilitated by providing better information on products.
- Qualitative growth requires less overall regulation and more strategic regulation in the form of quality standards.

Creating room for craftsmanship

The shift in the direction of qualitative growth will only succeed if craftsmanship receives an impetus in both education and businesses. In recent years increasing attention has been focused on craftsmanship in education, e.g. as shown by the arrival of vocational schools, an initiative from society which is being embraced by more and more Regional Training Centres (ROCs), companies and government bodies. As a result, people's chances of finding work are increased and courses of study can be more closely tailored to match the demands of the labour market. The idea of vocational schools therefore should be supported. It is important, for example, that businesses offer work study places to students and provide industry specialists to teach. Municipalities can provide a facilitating role by bringing schools and companies together and organizing exchange programmes.

In companies craftsmanship can be put on a firmer footing by organizing the production cycle differently and thus making sustainability and creativity more an intrinsic part of the product design phase, in particular. This means that product development needs to be more oriented towards supplying clients with customized goods²¹⁶, together with more consideration of the life-cycle of the product and its adaptability.

Increasing numbers of businesses are seeing the importance of this and changing their working methods accordingly. Companies, for example, are increasingly entering into dialogue with their customers such that customers as well as creatively trained people, such as artists, are gaining more influence in product design. Companies are also devising concepts in which the customer no longer owns the physical product (e.g. the lighting) but buys a service (light); in this way the manufacturer still has the incentive and opportunities to supply the service as economically as possible by using energy and raw materials sustainably.

The above changes to the product cycle offer new opportunities for craftsmanship which could be even better utilized. This applies particularly to repair: more repairs of existing products will lead to less use of scarce raw materials and more employment for skilled manual workers at all levels. There are many types of products which would easily lend themselves to repair where this is

216 | In the literature this trend is also referred to as 'mass customization'.

not currently done. The underlying cause is that relatively cheap raw materials and relatively expensive labour mean that there is still insufficient incentive for companies to make products that can be repaired. It is expected that as raw materials become more expensive, along with the lower taxation on labour that we are advocating, will provide a solution to this problem. In its procurement policy government could also take a leading role in terms of stipulating standards related to the repair of products (and the possibility of doing so).

Demand side of the economy

To enable evolution in the direction of a qualitatively oriented economy, further changes will be necessary on both the demand and the supply sides of the economy. The necessary changes on the demand side of the economy relate to consumption patterns. As Christian Democrats also did in the period when the Rhineland model was developed²¹⁷, we ask people to take into account the way in which an item is produced when making their purchasing decisions. Does the company take environmental aspects into account in the production process? What were the working conditions during the production process? Is it possible to buy a local product? Are there products on the market that have been made with more of an eye for craftsmanship?

In this context the information provided on products is important. Government has a role here to set clear standards so that consumers can make more informed choices. Many people will avoid products made in an irresponsible or unsustainable manner if they know about it. It is the responsibility of government, ideally in the European context, to establish a framework for the transparent provision of correct product information. This goes beyond simply describing the product features: it is important that consumers also know about what happens further along the production chain.

Supply side of the economy

The changes necessary on the supply side of the economy relate to working people focusing on the supply of products and services which have more beauty and have been made with dedication and consideration for the environment. In other words: we must strive to incorporate modern forms of sustainability and craftsmanship into the production process. It will not be easy to make the transition to different production methods. This applies to both the transformation of the capital stock as well as the way in which government can exercise influence over this. We can facilitate the transformation of capital stock by introducing new institutions. We can change the method of steering through

^{217 |} See, for example, this quote by economist Wilhelm Röpke, one of the founders of the Rhineland Model: 'Those consumers who can at all afford it should not shrink from the sacrifice of a few cents in order to carry out an economic policy of their own and support artisans to the best of their ability for the good of the community; but they must find in the artisan himself a willing partner, ready to give his best.'

enabling the government to draw up regulations in a different way. We will briefly expand on these two aspects below.

In relation to the capital stock the negative external effects of existing production methods, e.g. environmental impacts, are insufficiently included in the prices. The payback periods are also long and entrepreneurs who introduce radical innovations are often met with public resistance, the free-rider problem²¹⁸ and government obstacles, such as regulations and permits²¹⁹. We observed in chapter 4 that other countries are further ahead in introducing new production methods linked to industry policy. The Netherlands therefore needs new institutions to promote innovation in the form of entrepreneurial ecosystems. See the next section for further details of this shift.

Fewer regulations and strategic regulations

In terms of changing the way in which the government sets rules, simplicity should be the guiding principle. Politicians and policy-makers must learn to refrain from making new rules for every change requested and with every incident that occurs. Worse still, many of these rules have a suffocating effect on public initiative and should therefore be abolished.

The government could also widen and step up the chosen Green Deals path – which aims to remove non-financial obstacles to greater sustainability on the basis of specific agreements. Entrepreneurs state, for example, that they still encounter obstacles when introducing innovative green ideas²²⁰.

The government could also make more use of strategic regulation. These are rules which set an ambitious goal and leave it open to the private sector how they achieve these goals. Unlike other regulations, strategic regulations do not target symptoms or incidents but quickly respond to a long term trend. Because strategic regulation leaves room for citizens and businesses to choose the means by which these goals can be achieved, this is often a far more efficient instrument than subsidies, for example. Strategic regulation in the form of quality standards in the area of the environment, for example, can also create a 'first mover' advantage and put a premium on innovation.

Given the ambitious goals which apply here, a first mover advantage means that Dutch or European companies can move more quickly to devise innovative solutions and thus gain an advantage over other companies in other countries. Strategic regulations should preferably be introduced in the European context. A successful example of strategic regulation is the system of emission standards introduced for the car industry.

^{218 |} The free-rider problem is what happens when players make use of the head start of another player without providing compensation for this.

^{219 |} Source: PBL (2013), chapter 4.

²²⁰ Ilbid.

5.5 Entrepreneurial ecosystems

The shift to be made

Until recently academics and policy-makers analysed the competitive strength of businesses – and ways of strengthening it – usually across a sector or branch of industry. Lately the models used to make these economic analyses have moved more in the direction of entrepreneurial ecosystems. These are flexibly organized, regional clusters of businesses and institutions which in constantly changing combinations of parties work on developing new ideas and their application. There are various good reasons for this paradigm shift, most of which have already been mentioned earlier in this report.

Firstly, we see that innovation often occurs where disciplines intersect²²¹. New added value is therefore more often created in cross-sector cooperative ventures. Secondly, there is a growing realization that culture and cooperation are vital to each of the three forms of innovation that drive economic development. Thirdly, we observe that rate of change in the environment is accelerating and that in the future competition will be increasingly at task level and less at sector level (a development described in chapter 3)²²².

Entrepreneurial ecosystems provide an opportunity for the cross-fertilization of ideas together with collaborative associations, so that companies can join forces and share risks to be able to rapidly adapt to an ever shifting environment. In other words, innovation and adaptation can best take place in clusters at regional level. This will lead to various institutional models tailored to the regional economic conditions and which are globally competitive. Regionalization of the innovation policy is therefore the most important recommendation in this section.

How does the shift towards entrepreneurial ecosystems relate to economic growth and the good life?

The main idea for this guiding principle is:

• Entrepreneurial ecosystems require the regionalization of innovation policy.

The other measures in this section include:

- The regionalization of innovation policy must be based on a clear national framework with social challenges as the focus point.
- The regional coordination of innovation policy should be placed in the hands of cooperative alliances between education, government, and businesses.
- A national research centre and knowledge resource should be set up for

^{221 |} Cf. Schumpeter. 222 | CPB (2013).

SMEs to foster internationalization and knowledge exchange between businesses

Regionalizing innovation policy

As stated in chapter 2, our understanding of innovation as the key to economic development has greatly changed in recent years. We also see that global changes are taking place at such a rate and the nature of innovation has changed to such an extent that central management of innovation policy – whether in a company or a country - no longer makes sense. Innovation policy therefore needs to move away from centrally managed policy in the direction of entrepreneurial ecosystems.

This shift is already beginning to take place from the bottom up, e.g. initiatives in the Eindhoven and Wageningen regions, and deserve strong support. Regional innovation policy constitutes a good way to extend the top sector policy which in recent years has worked to strengthen the basic infrastructure of innovation at national level. At the same time regionalization of innovation policy will provide the necessary impetus for cross-sector cooperation and greater opportunities for challengers in the market Regionalization of innovation policy also fits in well with European innovation policy.

In the formulation of regional innovation policy a clear national framework of innovation agreements will be necessary that regional parties can use as a basis to further flesh out the policy²²⁵. This framework should provide clear goals while at the same time providing sufficient room for regional preferences²²⁶.

This will help to prevent fragmentation of the policy while the use of resources and implementation can be adapted in the best way to fit the regional context.

The focus point for innovations in the national framework should be social challenges. This will foster cross-sector cooperation and will also prevent national government standing in the way of the adaptability of businesses and regions with too specific and thus inefficient investment decisions, something which has unfortunately all too often happened in the past²²⁷

Furthermore, opting to focus on social challenges fits in well with the human motivation described in chapter 1 to combine ambition with service and

^{223 |} Advisory council for science, technology and innovation (AWTI, 2012).

^{224 |} See also Eijffinger (2012).

^{225 |} Frenken (2014).

²²⁶ To quote the WRR (2008): 'In regional innovation policy aim for restraint in the area of design and management by central government and provide sufficient room for regional initiative and specifics.'

^{227 |} Rodrik (2008).

vocation. As set out in the previous section, sustainability should be one of the challenges that the Netherlands needs to get to work on. The innovation agreements also need to include clear criteria for the allocation of innovation funding throughout the regions as well as criteria on how money will be spent in the regions. The total number of regions over which the money is to be shared should be limited to prevent policy fragmentation. The criteria for the allocation of funding to the regions should be based as much as possible on objective trend studies on the weight and economic impact of social challenges and should also include incentives to ensure that funds are spent as profitably as possible. Various regional models could compete against one another to increase the overall strength of the Dutch economy. Incentives will also have the effect of ensuring that regions look to neighbouring countries for cooperative alliances in European regions, which is also important to the Netherlands competitive strength.

Regional coordination

The organization of innovation policy in the regions can be passed to cooperative alliances between education, government and businesses. The role of the education institutes here is not only to facilitate the training and education of working people, but also in generating knowledge-intensive start-ups, like spin-offs.

The role of government lies mainly in creating suitable conditions for businesses to experiment with finding and exploiting new earning models. This is how 'information externalities' can be created. If, by experimenting, a business discovers a new earning model, other businesses can also benefit from this knowledge²²⁸. Government can offer shared facilities for businesses, e.g. shared spaces or equipment, to remove the barriers to finding new earning models.

There are also potential coordination externalities. This is when simultaneous, large-scale investments are needed to get a newly discovered earning model actually off the ground²²⁹. Government can take the coordination role upon itself and help to exert pressure so that all the relevant players contribute to the necessary investment in the new earning model. Support should be prioritized for smaller promising companies based on the concept of 'support the challenger' instead of 'support the winner'²³⁰.

Internationalization

There is another role for government in discovering international earning models for businesses. Recent research among internationally active businesses.

^{228 |} Ibid.

^{229 |} Ibid.

^{230 |} See also Eijffinger (2012).

ses in the top sectors shows that more than 70% of these companies are in need of government support when doing business internationally, for example, support with exports²³¹. Cross-sector information exchange also gives positive externalities for SMEs²³². Therefore a national research centre should be set up for SMEs to foster internationalization along with information and knowledge exchange between businesses²³³.

The European Union and cross-border cooperation

The European Union – where many important trade partners of the Netherlands are found – plays an important part in the internationalization of Dutch businesses. About three quarters of the goods export by Dutch companies takes place in the European Union. In terms of the export of goods the Netherlands even holds second place in the European Union²³⁴. We would urge that the internal market be completed, so that Dutch businesses have more opportunities to enter markets in other European regions, and vice versa. A consideration is that the completion of the internal market should not lead to downward pressure on employment conditions, because this would then be at the expense of human development.

In addition, we would like see cross-border cooperation between Dutch regions and other European regions promoted. It would be worthwhile, for example, to coordinate economic and spatial planning policies, particularly in consultation with Belgian and German regions where, due to their vicinity and strong economic ties, there is still considerable institutional benefit to be gained. This could be in infrastructure projects, investment agendas and the development of joint transport and knowledge hubs (in Dutch: mainports and brainports).

5.6 Thinking long term

The shift to be made

Based on the Christian Democratic view of the Netherlands' earning potential it appears that creating a virtuous circle of human growth and economic development will take time, perseverance and a willingness to make sacrifices, both in individual businesses as well as in society. It is therefore important that we allow our decisions to be led by the long term costs and benefits, even where these costs and benefits are generally more difficult to quantify. Therefore in this section we will consider the need to have a long term focus.

^{231 |} Van der Linden et al. (2013).

²³² To quote the WRR (2008): 'The lack of absorption capacity and the high degree of implicit knowledge leads to what could be described as 'cognitive' transaction costs and for many smaller businesses these are relatively high. This a good reason for subsidizing knowledge transfer to smaller businesses.'

^{233 |} Thurik (2014).

^{234 |} CBS (2014).

Institutions are vital to reaching long term goals. In this section we will describe three sectors which have a large long term impact on society and the economy; these are the government sector, the housing market and the financial sector. The government sector stands out because as we have noted elsewhere in this report, the quality of the government is very important for the proper functioning of the economy (e.g. the role of the policy analysis bodies), while the government also needs to leave sufficient room for initiatives to come from society – from private citizens and businesses. This means that recommendations are needed on how government can facilitate institutional experiments and on the size of government. We will examine these and other recommendations here below.

How does the aspect of thinking long term relate to economic growth and the good life?

The main idea for this guiding principle is:

• A focus on the long term requires a government that provides room for initiatives to come from society and facilitates institutional experiments.

The other measures in this section include:

- The tax system needs to be simplified, also through the introduction of a social flat tax, reducing the number of tax bands in the energy tax and making the VAT rate uniform.
- Relaxation of the spatial planning policy should provide an impetus for new housing development.
- The housing association sector needs to be restructured by abolishing the housing allowance and introducing a system of income-dependent rentals.
- The tax treatment of borrowed capital and own assets should be made the same.

Role and size of government

In the previous chapter we observed that without a change of policy the future ageing of the population and reduction in the natural gas revenues would lead to an increase in the collective tax burden. This is undesirable, because the government already takes about half the national income and there needs to be sufficient room left over for private initiative and initiatives from society. On top of which, if the government continues to take an ever greater share of the national income this means that people will have to work longer hours in order to have the same level of disposable income. To enable people to thrive and develop it is rather more the case that people to have sufficient time to

rest, reflect, meet with others, take part in voluntary work and pursue creative activities.

The reduction of the tax on labour previously advocated should therefore not be a shift in the burden of tax but a nett tax reduction. Therefore further reforms will be necessary in various government sectors in order to curtail the collective tax burden. A relatively large policy effort will be necessary concerning long-term care which - compared with other countries – in the Netherlands is among the best in the world²³⁵ but at the same time relatively expensive and, due to the ageing population, could in the future lead to tax increases²³⁶. We therefore recommend that a new comprehensive study be carried out on ways of making care (and long term care) more affordable without compromising on quality.

We also stated in chapter 2 that incorporating institutional experiment could help strengthen the resilience of institutions in the long term. The Christian Democrats would therefore like to see more room for institutions diversity²³⁷. The regionalization of innovation policy previously referred to is an example of this, but institutional experiments are also needed in other areas. This could include new forms of socio-economic consultation which could help to renew the Polder model from the inside out, taking into account the position of the self-employed, among other things. The government could also facilitate new collectives in legislation, e.g. businesses forming alliances for pension arrangements. The government could also remove statutory barriers to new forms of business finance, for example, setting up credit unions²³⁸.

Taxation

Tax incentives and subsidy schemes are used in policy to influence people's behaviour and to reach certain goals in society. Although there are generally sound reasons for specific tax incentives and subsidy schemes, the sum total of incentives and subsidy schemes has become too complex. This causes problems particularly to SMEs and smaller innovative and green businesses that wish to grow. The same adage applies here as in section 5.4, which is: simplicity. The Christian Democrats would therefore like to advocate a simplification of the tax system and a streamlining of subsidy schemes to create more room for society²³⁹.

The practical formulation of a simplified tax system can be achieved by introducing the principle of a flat tax. This would apply, for example, to income

^{235 |} Björnberg (2014).

^{236 |} Gradus & Van Asselt (2011).

^{237 |} See, for example, *Christen Democratische Verkenningen* journal edition 'Amsterdam is Ameland niet' [Amsterdam is not Ameland], year 2010, no. 1 [in Dutch].

^{238 |} Camdzic & Duffhues (2011).

^{239 |} See also the study of the CDA Research Institute (2011) 'De ontregelde samenleving' [Society disrupted].

tax with the introduction in box 1 of a social flat tax²⁴⁰.In addition, it could be considered whether the number of bands for the energy tax could be reduced from the present four to two bands. This could reduce the administrative burden on companies and private individuals, lead to less arbitration, with fewer perverse incentives²⁴¹. The same applies to VAT. Businesses have indicated that the classification in a high or low VAT rate is unnecessarily complex and amounts to an administrative burden. Therefore we would urge that a study be carried out on making the VAT rate uniform, with only daily needs and books exempted.

Housing market

There are various bottlenecks in the Dutch housing market. Now that prices on the housing market have stabilized, there is room for the housing market to start moving again. One measure for the supply side of the housing market is to give an impetus to new housing development (where there is a latent demand), e.g. through a more relaxed spatial planning policy²⁴². New housing is needed mainly in the segment of affordable owner-occupier housing and affordable private sector rentals.

As described in chapter 4, the Dutch housing association sector is artificially large and is facing intractable problems, such as subsidized rentals (skewed income to rent ratio) and other inefficiencies. Therefore we support the restructuring of the housing association sector which has already begun. The restructuring of the housing association sector can be speeded up by abolishing the rent allowance and replacing it by a system in which rent becomes income-dependent. In this way housing associations would be given the incentive to allocate housing more efficiently which will promote the principle of people moving up the housing ladder and thus reducing the gap between the rental and bought housing markets. In the context of strategic regulation, as outlined above, stricter sustainability requirements could also be introduced for new house building. This would provide an impetus for sustainable building and could also strengthen the competitive position of the Netherlands' building and construction sector²⁴³.

Asset formation and the financial sector

In chapter 4 we reached the conclusion that various reforms were necessary in the financial sector which have so far not sufficiently taken hold. Financial insti-

^{240 |} A more detailed explanation of the social flat tax can be found in the CDA Research Institute report (2009): 'Een sociale vlaktaks: naar werkbare en begrijpelijke inkomstenbelastingen' [A social flat tax: towards a form of income tax that is workable and understandable] [in Dutch].

^{241 |} For example, the perverse incentive for energy-intensive industries to merge in order to qualify for a lower energy tax rate.

^{242 |} CDA Research Institute (2011).

^{243 |} Oudshoorn (2014).

tutions are therefore faced with the task of stepping up the debate on professional ethics in their own organizations which should lead to a more client oriented attitude, lower fees and the ability to provide credit facilities. Where financial institutions fail to meet their responsibilities, the government should play a more active role in straightening things out. The government could, for example, through its competition authority, promote competition in the financial sector. Statutory compensation mechanisms could also be put in place for clients who have suffered losses owing to the misconduct of banks, e.g. because they were insufficiently informed about the risks of complex financial products.

We also noted that in the Netherlands borrowed capital has a tax advantage relative to own assets. This obstructs long-term thinking and also does not encourage prudence. Therefore the tax treatment of borrowed capital and own assets should be made the same. This means reducing the deductibility of interest, which could be offset by a lower tax on profits. A study should be carried out on how this will affect companies that come to the Netherlands in terms of their tax and economic position. Encouraging asset formation also means that in the future the financial sector will be smaller in size.

In addition, asset formation should be encouraged in households, e.g. by making the repayment of mortgage debts more attractive from a tax viewpoint, by making it such that the interest deduction only applies to annuity mortgages. Existing mortgages are currently exempt from the reformed mortgage interest deduction. It is undesirable however that for 30 years two regimes will exist side by side for mortgage interest. This will lead to skewed growth in incomes between generations and high operational costs, both of which are undesirable. Our recommendation therefore is to limit the transition period to 6 years, after which old mortgages would become subject to the new tax treatment for the interest deduction. There must be tax compensation for the limitation of the transition phase so that the measure can be introduced in a way which is as income neutral as possible.

Summary and conclusions

The introduction to this report began with the question: what is the connection between Rembrandt and the chip machine manufacturer ASML? What followed in this report showed that for people to thrive and the economy to flourish, economics and culture depend on one another in many, often surprising, ways. In this final chapter we will summarize the most important findings and bring together the various insights and key themes in a single figure: the synopsis. This is shown in the following figure below. Against the background of a map in the shape of a chip you can see how under the overall theme of economic growth serving the good life various lines come together. We will now explain the figure.

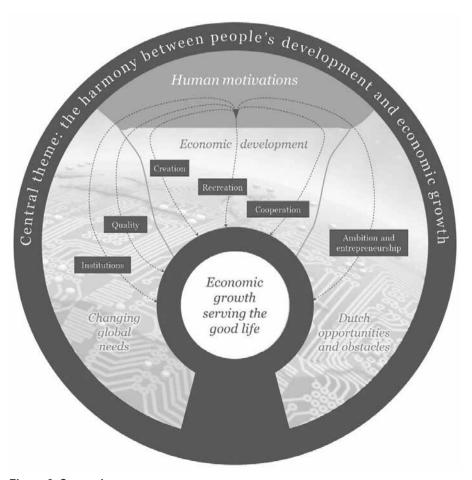


Figure 2. Synopsis.

Creation and recreation

Human motivations form the starting point for our vision of the Netherlands earning potential. Ambition, service and vocation are all factors which drive people to become economically active. Besides which, people want to do work which meets moral and ethical standards, as well as quality standards – there is a desire for craftsmanship. At the same time people need to be able to set their work aside on a regular basis, so that the rest that this provides enables them to use their free time for relaxation, for reflection and to meet other people. Creation and recreation therefore constitute the first two key themes in this report (chapter 1).

Cooperation

From this starting point other key themes lead us through various relevant aspects. Based on what motivates people we see that they are inclined at every conceivable level of activity to make change and introduce innovations. We advocate changing the definition of innovation such that cooperation (i.e. co-creation) plays a vital role. People are social beings while at the same time increasing specialization and converging technologies demand more interdisciplinary cooperation. Given that cooperation cannot be seen as separate from culture, the Dutch culture makes an important indirect contribution to our earning potential. This applies also to institutions that steer people's conduct and make it possible to respond effectively to unexpected circumstances. Cooperation and institutions are therefore the next two key themes of this report (chapter 2).

Changing global needs

In this report we define the earning potential of a country as the degree to which people are able to contribute and can together enjoy the fruits of their labour. This is by no means assured. We observe that it is necessary to adapt to changing global demands (chapter 3) and that the Netherlands must capitalize on its opportunities and find ways to remove obstacles (chapter 4). The two most important global changes that we point out in this report are demographic shifts and the growing scarcity of natural resources. Besides this, technological shifts have a major and inherently unpredictable impact, not just on the outcome of economic development, but also on the economic development process itself.

Opportunities and obstacles for the Netherlands

The Netherlands is well placed to seize opportunities. There is considerable innovative potential in the Netherlands, for example, and in terms of knowledge and skills this country is ahead of others. At the same time there are concerns about the productivity gap with the US which has arisen since the Great Reces-

sion and about the relatively low level of ambition in the Netherlands, which is also reflected in the relatively small number of young, rapidly growing businesses and the lack of business investment. In various sectors of the Dutch economy there are also obstacles, e.g. the rigid separation of the social security facilities available for employees and the arrangements for the self-employed.

Guiding principles

Given the opportunities and challenges outlined, the Netherlands needs a sound strategy to be able to promote harmonious human growth which enables people to thrive and economic development which leads to prosperity. We argue that the Netherlands would benefit most from pursuing a creative strategy. This strategy involves getting in on the ground floor of products and services and thus acquiring a position in various value chains. This requires improving quality and strengthening entrepreneurial spirit, the final two key themes in this report.

We have described a strategy for the Netherlands based on five guiding principles which naturally arise from the key themes and turned them into practical policy recommendations for the medium term (chapter 5). Firstly, we would like to advocate a shift towards creative learning which requires different education methods in which more emphasis is placed on non-cognitive skills, like creativity, cooperation and communication skills. Secondly, we argue for a shift towards appreciative employment relationships which requires reforms to social security in the form of a basic insurance for all working people. Thirdly, we argue for a move towards qualitative growth, which requires an impetus for craftsmanship and professional skill both in education as well as in labour organizations. Fourthly, we argue for a shift in the direction of entrepreneurial ecosystems, which requires regionalization of the innovation policy. Our fifth argument is for a shift in the direction of thinking long term, which requires a government that allows room for and facilitates institutional experiments.

Each of these guiding principles describes a change of direction which responds to the global trends and developments while also taking into account the ways in which economic a form of economic growth can be promoted that serves the good life. In this way the Netherlands will move towards the goal arising from our vision of the country's earning potential, which is the economy acting in the service of the good life (the *bonum commune* or the general good).

Inviting prospects

What prospects does this give rise to? The prospect of a society in which economic values and social values are inherent to one another. We see this vision most clearly before us when we make the individual and human dignity the prime consideration and ask ourselves a simple question: what do we want from our work and our daily routine? Based on Christian Democratic thinking

the answer to this questions is unequivocal: our work must be connected with our deepest human motivations and ambitions, do justice to people's desire to deliver quality – with dedication, an eye for beauty, consideration for the environment – and allow room for rest and culture, so that people can flourish in all their facets and can reflect on the meaning of life and that it is worthwhile to create. In short, an economy in which people are able to contribute and together enjoy the fruits of their efforts.

To conclude

It will not be simple to implement the guiding principles and associated policy measures outlined in this study. If, in making these changes, we manage to maintain and strengthen the link between economic growth and prosperity and the good life, our efforts will have been more than worthwhile!

Bibliography

Mottos

- Grice-Hutchinson, M. (1952), *The School of Salamanca: Readings in Spanish Monetary Theory, 1544-1605.* Oxford: Clarendon Press.
- Hayek, F. (1945), 'The Use of Knowledge in Society', *The American Economic Review*, Vol. 35, No. 4, pp. 519-530.
- Mann, T. (1997), *Buddenbrooks, Verfall einer Familie*. Frankfurt am Main: S. Fischer Verlag.

Main text

- Aalst, I. van, O.A.L.C. Atzema, R.A. Boschma & F.G. van Oort (2006), 'Creatieve klasse en economische groei in stedelijk Nederland'. In: B. Hofstede & S. Raes (red.), *Creatief Vermogen*. Den Haag: Elsevier Overheid. pp. 123-155.
- Althusius, J. (2010), *Politica*. Translated from Latin into English by Frederick Smith Carney. Indianapolis: Liberty Fund Inc., 2010.
- Anonymous (2015), 'The future of work', in: The Economist, 3 January 2015.
- Aristoteles (1912), *Politica*. Translated from Greek into English William Ellis. London: uitgeverij J.M. Dent & Sons Ltd., 1912.
- Auger, P., Devinny, T.M., Dowling, G.R., Eckert, C. & Lin (N.), 'How Much Does a Company's Reputation Matter in Recruiting', MIT Sloan Management Review, Spring 2013.
- AWTI (2012), *Balans van de topsectoren 2014*. Den Haag: Adviesraad voor wetenschap, technologie en innovatie.
- AWVN (2015), Een verantwoorde weg naar groei Nieuw sociaal beleid voor Nederland. Den Haag: Algemene Werkgeversvereniging VNO-NCW.
- Ball, L. (2014), 'Long-Term Damage From The Great Recession In OECD Countries', NBER Working Paper No. 20185.
- Benedictus XVI (2009), *Caritas in Veritate*. Encycliek retrieved via http://www.rkdocumenten.nl/rkdocs/index.php?mi=600&doc=3041.
- Benschop, A., 'Arbeid: een lastig en omstreden begrip', retrieved via http://www.sociosite.net/labor/arbeid/.
- Beugelsdijk, S. (2007), 'Entrepreneurial Culture, Regional Innovativeness and Economic Growth', *Journal of Evolutionary Economics*, Vol. 17, No. 2.
- Bijl, R., Boelhouwer, J., Pommer, E. & N. Sonck (red.; 2013), *De sociale staat van Nederland*. Den Haag: Sociaal en Cultureel Planbureau (SCP).
- Björnberg, A. (2014), *Euro Health Consumer Index*. Täby: Health Consumer Powerhouse.
- Black, A. (2002), *Guild and State: European Political Thought from the Twelfth Century to the Present*. St. Louis: Transaction Publishers.

- Bovenberg, L., Neuteboom, M. & P.J. Schenderling, 'De virtueuze cirkel: het verband tussen economie en cultuur', *Christen Democratische Verkenningen*, 2014, Winternummer.
- Bovenberg, L. (2013), 'Nederland heeft overtuigende groeiagenda nodig', *Tijdschrift voor Openbare Financiën*, jaargang 45, 2013, nummer 4, pp. 199-207.
- Breedveld, K. & Broek, A. van den (2004), *De veeleisende samenleving: De sociaal-culturele context van psychische vermoeidheid*. Den Haag: Sociaal en Cultureel Planbureau (SCP) & Nederlandse Organisatie voor Wetenschappelijk Onderzoek (NWO).
- Bruggink, A. & D. van der Hoeven (2014), *Groene groei: naar de maatschappij van 2040. Welvaart voor meer mensen met minder schade aan het milieu.*Amsterdam: Biobased Press.
- Buijs, G. (2011), 'Wie markt zegt, moet ook moraal zeggen', in: Christendemocraat. nr. 27 augustus 2011.
- Butter, F. den & E. Mihaylov (2013), 'Veranderende vaardigheden op de Nederlandse arbeidsmarkt', *Economisch Statistische Berichten*, Vol. 98, No. 11, pp. 618-621.
- Caballero, R.J. & M.L. Hammour (1997), 'Jobless Growth: Appropriability, Factor Substitution, and Unemployment', NBER Working Paper 6221.
- Camdzic, B. & P. Duffhues (2011), 'Waarom kredietunies de financiering van kleine bedrijven kunnen verlichten', *Me Judice*, 6 December 2011.
- CBS (2014), Internationaliseringsmonitor 2014 tweede kwartaal. Heerlen: CBS.
- CBS Statline, Nationale rekeningen; opbouw binnenlands product (bbp), 2013.
- Clevers, H. (2014), 'Laat wetenschap werken', jaarrede van de president van de Koninklijke Nederlandse Akademie van Wetenschappen (KNAW) gehouden op 26 mei 2014.
- CPB (2013), De Nederlandse arbeidsmarkt in taken: Eerste bevindingen uit de Nederlandse Skills Survey. Den Haag: Centraal Planbureau.
- CPB (2014a), *Uncertain supply, fragile demand*. The Hague: CPB Netherlands Bureau for Economic Poicy Analysis.
- CPB (2014b), Minder zorg om vergrijzing. Den Haag: Centraal Planbureau.
- CPB (2014c), *Centraal Economisch Plan 2014*. Den Haag: Centraal Planbureau.
- CPB (2014d), *Bank recapitalisation*. The Hague: CPB Netherlands Bureau for Economic Poicy Analysis.
- CPB (2014e), *Vermogensschokken en consumptie in Nederland*. Den Haag: Centraal Planbureau.
- De Jong, H.J., 'Zondag en sabbat: over het ontstaan van de christelijke zondag', rede ter gelegenheid van de 431e Dies Natalis van de Universiteit Leiden, 2006.

- Dijkstra, M. & M.P. Schinkel (2012), 'Hollands hoge hypotheekrentes', *Economisch Statistische Berichten*, Vol. 97, pp. 594-597.
- Dooyeweerd, H. (1969), 'A new critique of theoretical thought Volume II', The Presbyterian And Reformed Publishing Company.
- Duflo, E. & R. Chattopadhyay (2001), 'Women as policy makers: Evidence from a randomized policy experiment in India', NBER Working Paper 8615.
- Eijffinger, S. (2012), 'Stilstand in kennisland Nederland', *Me Judice*, 6 November 2012.
- EIM (2012), Dynamiek van investeringen in Nederland Een onderzoek naar de ontwikkeling van de investeringsquote in zeven bedrijfstakken. Zoetermeer: FIM.
- Eliot, T.S. (2004), Complete Poems And Plays. London: Faber & Faber.
- Gedicht: 'Choruses from the Rock'. Eliot, T.S. (1973), *Notes Towards the Definition of Culture*. London: Faber & Faber.
- European Commission (2012), *Global Europe 2050*. Brussel: Directorate-General for Research and Innovation.
- Feldhusen, J.F. (2011), 'Creativity: A Knowledge Base, Metacognitive Skills, and Personality Factors', *The Journal of Creative Behavior*, Vol. 29, No. 4, pp. 255-268.
- Fleisch, E. (2010), 'What is the Internet of Things? An Economic Perspective', Auto-ID Labs White Paper.
- Franciscus, 'Evangelii Gaudium: over de verkondiging van het Evangelie in de wereld van vandaag', 2013, exhortatie retrieved via http://www.rkdocumenten.
- nl/rkdocs/index.php?mi=600&doc=4984.
- Frey, C.B. & M.A. Osborne (2013), 'The Future of Employment: How Susceptible Are Jobs to Computerisation?', Oxford Martin Programme on the Impacts of Future Technology.
- Friedman, T. (1999), *The Lexus and the Olive Tree*. New York: Farrar, Straus & Giroux.
- Ginkel, R. van (1992), 'Typically Dutch... Ruth Benedict on the National Character of Netherlanders', *Amsterdams Sociologisch Tijdschrift*,
- retrieved via http://www.uva.nl/binaries/content/documents/ personalpages/g/i/r.j.vanginkel/en/tab-two/tab-two/cpitem%5B41%5D/ asset?f=ginkel&1355373422251.
- Gradus, R. & E.J. van Asselt (2011), 'De langdurige zorg vergeleken in Nederland en Duitsland', *Economisch Statistische Berichten*, Vol. 96, pp. 202-204.
- Grossman, G.N. & E. Rossi-Hansberg (2006), 'The Rise of Offshoring: It's Not Wine for Cloth Anymore', paper prepared for the symposium sponsored by the Federal Reserve Bank of Kansas City on 'The New Economic Geography: Effects and Policy Implications', Jackson Hole, Wyoming, August 24-26, 2006.

- Hausmann, R. Hidalgo, C.A., Bustos, S., Coscia, M., Simoes, A. & Yildirim (2013), Atlas of Economic Complexity: Mapping Paths to Prosperity. Cambridge, Massachusetts: Massachusetts Institute of Technology & Center for International Development, Harvard University.
- Hayek, F.A. (1960), *The Constitution of Liberty*. Chicago: Chicago University Press. (H15 Economic Policy and the Rule of Law, pp. 329-341.)
- Hayek, F.A. (1945), 'The Use of Knowledge in Society', *The American Economic Review*, Vol. 35, No. 4, pp. 519-530.
- Hengstmengel, J., 'Dooyeweerds filosofie van de economie', *Radix*, Vol. 37, no. 3 (2001), pp. 191-201.
- Hoffmann, A.N. & M. Junge (2006), 'Documenting Data on High-growth Firms and Entrepreneurs across 17 Countries', Mimeo, Fora Copenhagen.
- Jacob, K & Jänicke, M. (2009), A Third Industrial Revolution? Solutions to the crisis of resource-intensive growth. Berlin: Forschungsstelle Für Umweltpolitik, Freie Universität Berlin.
- Kay, J. (2004), The Truth About Markets: Why Some Nations are Rich But Most Remain Poor. London: Penguin.
- Keynes, J. M. (1936), *The General Theory of Employment, Interest and Money*. London: Macmillan.
- Langenberg, H. & D. van den Bergen (2009), 'Helft economische groei in 1995-2007 door toename productiviteit, Sociaaleconomische trends', Heerlen: CBS.
- Leo XIII, *Rerum Novarum*, deel II, hoofdstuk 2. Encycliek retrieved via http://www.rkdocumenten.nl/rkdocs/index.php?mi=600&doc=651.
- Linden, B. van der, Tiggeloove, N. & P. van der Zeijden (2013), *Topsectoren in beeld: internationale oriëntatie topsectoren*. Zoetermeer: Panteia.
- Lucas, R., 'On the Mechanics of Economic Development', *Journal of Monetary Economics*, Vol. 22, pp. 2-42.
- Marshall, A. (1997), Principles of Economics. New York: Prometheus Books.
- Merkel, A. (2011), 'Bericht der Vorsitzenden der CDU Deutschlands', 24. CDU Parteitag, 15-11-2011.
- Ministry for the Interior and Kingdom Relations (BZK) (2013), *Rijksbrede Trend-verkenning*. Den Haag: Strategieberaad Rijksbreed.
- MKB Nederland (2008), 'Wat werkgevers weerhoudt: belemmeringen voor een hogere arbeidsdeelname', onderzoek door Langman Economen in opdracht van MKB-Nederland.
- MKB Nederland (2015), *Kansrijk! De groeiagenda voor ondernemerschap in het mkb*. Den Haag: MKB Nederland.
- Mullainathan, S. & E. Shaffir, 'Schaarste: hoe gebrek aan tijd en geld ons gedrag bepalen', Maven Publishing, 2014.
- National Intelligence Council (2012), *Global Trends 2030: Alternative Worlds*. Washington, DC: National Intelligence Council.

- Niebuhr, R. (2005), *Moral Man, Immoral Society*. London: Bloomsbury Publishing PLC.
- Niebuhr, R. (1996), *The Nature and Destiny of Man*. Louisville: John Knox Press.
- Nooteboom, B., W. Vanhaverbeke, G. Duysters, V.A. Gilsing & A. van den Oord (2007), Optimal cognitive distance and absorptive capacity, *Research Policy*, Vol. 36, No. 7, pp. 1016–1034.
- North, D.C. (1993), 'The New Institutional Economics and Development', Washington University, St. Louis. (Unpublished essay. Section I of this essay is drawn from the John R. Commons lecture given at the American Economic Association meetings in January 1992 and subsequently published in the *American Economist* (Spring 1992, pp. 3-6) under the title 'Institutions and Economic Theory'.) OECD (2012), *Better Skills, Better Jobs, Better Lives: A Strategic Approach to Skills Policies*. Parijs: OECD Publishing.
- OECD (2013), OECD Skills Outlook 2013: First Results from the Survey of Adult Skills. Parijs: OECD Publishing.
- OECD (2014), *OECD Economic Surveys: Netherlands 2014*. Parijs: OECD Publishing.
- PBL (2013), Vergroenen en verdienen: Op zoek naar kansen voor de Nederlandse economie. Den Haag: Planbureau voor de Leefomgeving.
- Pieper, J. (2009), Leisure, the Basis of Culture. Ignatius Press.
- Piketty, T. (2014), *Capital in the Twenty-First Century*. Cambridge, Massachusetts: Harvard University Press.
- Ploeg, R. van der & W. Vermeend (2014), 'Hoge loonkosten remmen economie', in: *De Telegraaf*, 29 March 2014.
- Pot, F. (2012), 'Sociale innovatie: historie en toekomstperspectief', *Tijdschrift voor Arbeidsvraagstukken*, Vol. 28, No. 1, pp. 6-21.
- PwC (2011), 'Minerals and metals scarcity in manufacturing: the ticking time bomb'.
- Ricardo, D. (1821), 'On the Principles of Political Economy and Taxation', retrieved via: http://www.econlib.org/library/Ricardo/ricP.html.
- Ridley, M. (2010), 'When ideas have sex', retrieved via: http://www.ted.com/talks/matt_ridley_when_ideas_have_sex.
- Robinson, J. (1962), *Economic philosophy: An essay on the progress of economic thought*. St. Louis: Transaction Publishers.
- Rodrik, D. (2004), 'Industrial Policy for the Twenty-First Century', CEPR Discussion Paper No. 4767.
- Rodrik, D. (2004), 'Institutions Rule: The Primacy of Institutions Over Geography and Integration in Economic Development', *Journal of Economic Growth*, Vol. 9, pp. 131-165.
- Rodrik. D. (2007), 'Normalizing Industrial Policy', paper prepared for the Commission on Growth and Development, September 2007

- Roose, K. (2014), 'Does Silicon Valley Have a Contract-Worker Problem?', in: New York Magazine 18-9-2014, retrieved via http://nymag.com/daily/ intelligencer/2014/09/silicon-valleys-contract-worker-problem.html.
- Safranski, R. (2003), Het kwaad. Amsterdam: Uitgeverij Olympus.
- Schagen, J. van, 'Hoe goed is Googles 20-procent regel?', *Management Team*, 12 mei 2011.
- Schenderling, P.J. (red.; 2010), *De toekomst van de christen-democratie in Nederland*. Zutphen: Uitgeverij Eburon.
- Schenderling, P.J. (2011), 'Kenniseconomie bedreigt vormende taak van het onderwijs'. In: *Trouw*, 15 March 2011.
- Schumpeter, J. (1983), *Theory of Economic Development*. St. Louis: Transaction Publishers.
- Schumpeter, J. (2008), *Capitalism, Socialism and Democracy*. New York: HarperCollins Publishers Inc.
- Schwartz, B. & K. Sharpe (2010), *Practical Wisdom*. New York: Penguin Putnam Inc.
- Sennett, R. (2008), *De ambachtsman: de mens als maker*. Amsterdam: J.M.Meulenhoff.
- Skidelsky, R & E. Skidelsky (2013), *Hoeveel is genoeg? Geld en het verlangen naar een goed leven.* Amsterdam: De Bezige Bij.
- Smith, A. (2009), Theory of Moral Sentiments. Indianapolis: Liberty Fund Inc.
- Smith, A. (2003), *The Wealth of Nations*. New York: Bantam Dell Publishing Group.
- Solow, R.M. (1956), 'A Contribution to the Theory of Economic Growth', *The Quarterly Journal of Economics*, Vol. 70, No. 1, pp. 65-94.
- Spijkerman, C., 'BMW-werknemer 'mag' voortaan onbereikbaar zijn in vrije tijd', in: *NRC Handelsblad*, 17 February 2014.
- Stegeman, H., Belt, R. van de, & D. Piljic (2012), 'Minder groei: Van de Grote Recessie naar de Lange Stagnatie', Utrecht: Rabobank Kennis en Economisch Onderzoek.
- Storm, S. & R. Naastepad (2008) 'Wat de commissie-Bakker weten moet', *Economisch Statistische Berichten*, Vol. 93, pp. 260-263.
- Strategisch Beraad (2012), 'Kiezen en verbinden'.
- Swierstra, T. & E. Tonkens (2002). 'Klakkeloze keuzevrijheid'. In: *Christen Democratische Verkenningen*, themanummer 'Ontketening door vraagsturing?', pp. 23-33.
- Tolstoy (2008), *Twenty-three Tales*. West Valley City: Waking Lion Press. Verhaal: 'What men live by'.
- Thurik, R. (2011), 'De ondernemerschapseconomie', *Economisch Statistische Berichten*, Vol. 96, pp. 260-263.
- UWV (2014), 'Informatie en communicatie: samenvatting sectorbeschrijving'.

- Van Prooijen, T.O.F. (2006), *Mens, waar ben je?*. Den Haag: Wetenschappelijk Instituut voor het CDA.
- Volberda, H. (2012), 'Rigide arbeidsmarkt kan innovatie stimuleren', *Economisch Statistische Berichten*, Vol. 97, pp. 45-49.
- Volberda, H.W. et al. (2007), *Inspelen op globalisering: offshoring, innovatie en versterking van de concurrentiekracht van Nederland*. Den Haag: Stichting Maatschappij en Onderneming (SMO).
- Wetenschappelijk Instituut voor het CDA (2006), Een sociale vlaktaks: naar werkbare en begrijpelijke inkomstenbelastingen. Den Haag: Wetenschappelijk Instituut voor het CDA.
- Wetenschappelijk Instituut voor het CDA (2006), *Investeren in participeren*. Den Haag: Wetenschappelijk Instituut voor het CDA.
- Wetenschappelijk Instituut voor het CDA (2011), *De ontregelde samenleving*. Den Haag: Wetenschappelijk Instituut voor het CDA.
- Wetenschappelijk Instituut voor het CDA (2012), *De woningmarkt in beweging II*. Den Haag: Wetenschappelijk Instituut voor het CDA.
- Wetenschappelijk Instituut voor het CDA (2014), *Duurzaamheid als roeping*. Den Haag: Wetenschappelijk Instituut voor het CDA.
- Willets, D., 'Conservatism and Christian Democracy: three principles of public sector reform', 2003, in: Mayer, H. & T. Bernd Stehling (red.), *German-British Relations and the Spirit of Cadenabbia*. Konrad Adenauer Stiftung, chapter 5.
- Williamson, O.E. (1985), *The Economic Institutions of Capitalism*. New York: The Free Press.
- Wilthagen et al. (2014).
- WRR (2008), *Innovatie vernieuwd: opening in viervoud*. Amsterdam: Amsterdam University Press.
- WRR (2013), *Naar een lerende economie: investeringen in het verdienvermogen van Nederland*. Amsterdam: Amsterdam University Press.