# Chapter 1 of the Central Economic Plan 2017

**CPB Netherlands Bureau for Economic Policy Analysis** 

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# 1 Summary

Global economic growth is expected to accelerate this year and also slightly in the year thereafter; particularly due to growth increases in emerging economies. The global increase will also accelerate growth in relevant world trade to 3% this year, and 3.6% in 2018. The growth of the Dutch economy is robust with 2.1% this year and 1.8% in 2018. This growth is mainly driven by consumption and exports. Economic growth is coupled with increases in employment in the market sector as well as in health care. For this year, unemployment is projected to be 4.9% of the labour force, and for next year this will be 4.7%. Influenced by higher energy prices, inflation will increase to 1.6% this year, and 1.4% the following year. The decrease in unemployment and increase in inflation will cause contract wages to rise. For both 2017 and 2018, a moderate increase in median static purchasing power is projected, for both 2017 and 2018, of 0.1% and 0.3%, respectively, following the 2.7% increase in 2016. Last year's budget surplus is projected to increase further, to 0.8% of GDP by 2018, as continued economic growth will lead to higher revenues while government spending will lag behind.

The Dutch economy will grow with 1.7% on average in the period 2018-2021. The growth of labour supply and employment will be roughly equal, and hence unemployment will stabilise at 4,7%. Interest rates and inflation increase slightly, but remain low. The government budget balance will show a surplus of 1,3% in 2021 and government debt will decrease to 47% of GDP. The sustainability balance is in surplus, 0,5% GDP.

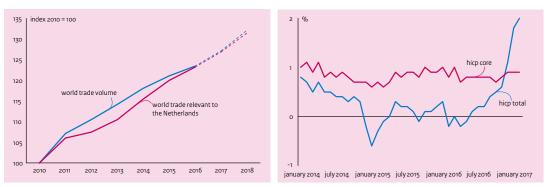
### 1.1 Summary and introduction

#### Global economy

The global economy will see continued slight growth, and monetary policy will remain exceptionally loose. However, global growth is projected to accelerate a little, both this year and the next, particularly due to increased growth in emerging economies. In China, lower growth, compared to recent years, is dampening global growth levels, although the latest figures on China are slightly more positive than expected. This also applies to the Russian economy, as it will benefit from rising oil prices. Recent figures and leading indicators show a slightly increasing growth in the advanced economies, particularly those outside the eurozone. US growth is robust and projected to be favourable, in the short term, which is connected with the expected adjustments to US budgetary policy. In the United Kingdom, domestic demand has developed more positively than expected, following the Brexit referendum. In the eurozone, both consumer and producer confidence have increased to levels that are currently higher than before the financial crisis. Economic growth in the eurozone is projected at 1.7%, both this year and the next, with growth in Germany being slightly above and France and Italy slightly below this average.

The impact of the increasing growth in emerging economies will also accelerate world trade growth to 3% this year, and 4.0% in 2018. Last year's trade elasticity (between global GDP growth and world trade) of 0.6 was at the lowest level since 2001. This is expected to normalise over the projected period, to a value of around 1. Growth in for the Netherlands relevant world trade will slightly lag behind, with 3% and 3.6% (Figure 1.1, left), because the main trading partners of the Netherlands are in Europe, where growth is less exuberant.

Figure 1.1 Steady growth in relevant world trade (left); HICP and core inflation in the eurozone (right)



Source: CPB calculation and Eurostat (link).

Nominal and real long-term interest rates have clearly risen, recently — particularly in the United States since its presidential elections in November of last year. The rise is partly driven by anticipated adjustments to the policy mix by the new federal government. Because of a more flexible budgetary policy, the spending impetus is expected to lead to greater inflationary pressure and possibly to less gradual normalisation of monetary policy.

Also in Europe, interest rates have recently gone up, albeit less strongly than in the United States. Over the projected period, the German long-term interest rate increases from 0.1% in 2016 to 0.4% in both 2017 and 2018.¹ In the United States, the policy interest rate was increased since December, as expected, which does not alter the fact that monetary policy remained loose in the advanced economies. The euro exchange rate is projected to decrease against the US dollar, both this year and the next, which will lead to an improved competitive pricing position vis-à-vis the United States. On the other hand, the euro exchange rate against currencies of a number of emerging economies has in fact increased.

For this year, a substantial increase in inflation in the eurozone is projected, mostly due to higher energy prices. Core inflation (inflation corrected for energy prices and unprocessed foods), however, will remain relatively low (Figure 1.1, on the right). Inflationary pressure is still not very large. Nevertheless, there will be some, although fairly limited, catch-up growth. In many EU countries, unemployment is projected to decrease, but will still be above the multi-annual average. On the other hand, the expected five-year inflation has recently increased to 1.7%, together with the increase in long-term interest rates, in both the United States and the eurozone. Rising energy prices and the depreciation of the euro will drive up inflation for 2017 to 1.5%. For next year, the stable rise in energy prices will not give an extra impetus to inflation, which will then go down again, slightly, to 1.3%. Following the decrease in 2016, oil prices are expected to increase again in 2017 to a little over USD 55 per barrel, after which the technical projections expect them to stabilise in 2018. The recent oil price rise can be related back to an increased demand, as a result of a steadily recovering global economy and the agreement between OPEC countries to limit oil production.

Global economic growth knows a number of risks. In the United States, uncertainties about policy have increased with the new federal government's unknown attitude towards international institutions, trade and regulation of the financial sector. In Europe, in light of upcoming national elections, a number of countries face uncertainties about future policy, including political commitment to the EU. Europe also faces the risk of sentiments around Brexit changing in anticipation of a hard exit, with high economic costs on both sides. Finally, the eurozone has a number of simmering risks, which may flare up again under unexpected setbacks, such as the weak balance sheets of some European banks and the sustainability of Greece's government debt. On the positive side, there is the risk of higher boosts to spending in the United States and China, having larger positive effects than currently expected.

#### The Dutch economy

Dutch economic growth is projected to continue, both this year and the following year, by a respective 2.1% and 1.8%. All spending categories will contribute to this growth (Figure 1.2, on the left).

<sup>&</sup>lt;sup>1</sup> The technical projections of oil prices, exchange rates and interest rates are based on the realisations in week 4 of 2017.

Table 1.1 Main data on the Netherlands, 2013-2018

International economy Itelevant world trade volume goods and services Competitor prices (a) Itelevant world trade volume goods and services Competitor prices (a) Itelevant world trade volume goods and services Competition of trade volume goods and services Com	2.8 -2.8 107.1 1.33 2.0	4.5 -0.7 97.9	ar, in % 3.9 8.0	2.7		
televant world trade volume goods and services competitor prices (a) bil price (in USD per barrel) curo exchange rate (in USD per euro) cong-term interest rate the Netherlands (level in %)	-2.8 107.1 1.33	-0.7		2.7		
competitor prices (a) bil price (in USD per barrel) uro exchange rate (in USD per euro) ong-term interest rate the Netherlands (level in %)	-2.8 107.1 1.33	-0.7		2.7		
oil price (in USD per barrel) uro exchange rate (in USD per euro) ong-term interest rate the Netherlands (level in %)	107.1 1.33		8.0		3.0	3
uro exchange rate (in USD per euro) ong-term interest rate the Netherlands (level in %)	1.33	97.9		-3.0	1.1	1
ong-term interest rate the Netherlands (level in %)			51.9	43.3	55.5	56
	2.0	1.33	1.11	1.11	1.07	1.
		1.5	0.7	0.3	0.7	C
olume GDP and spending						
Gross Domestic Product (GDP, economic growth)	-0.2	1.4	2.0	2.1	2.1	1
lousehold consumption	-1.0	0.3	1.8	1.8	2.0	1
Sovernment consumption	-0.1	0.3	0.2	0.7	8.0	1
vestments (including stocks)	-3.9	3.2	6.2	4.3	3.6	2
xportation of goods and services	2.1	4.5	5.0	3.7	3.5	3
nportation of goods and services	1.0	4.2	5.8	3.9	3.6	3
rices, wages and purchasing power						
rice level Gross Domestic Product	1.4	0.1	0.1	1.0	1.2	1
xport prices domestically produced goods, excluding energy	0.1	-0.8	0.7	-1.0	0.9	•
rice levels imported goods	-1.9	-2.7	-5.1	-4.5	5.1	•
nflation, Harmonised Index of Consumer Prices (HICP)	2.6	0.3	0.2	0.1	1.6	•
Contract wages market sector	1.2	1.0	1.3	1.7	1.8	2
rurchasing power, static, median all households	-1.4	1.2	1.2	2.7	0.1	(
abour market						
abour force	0.8	-0.4	0.4	0.4	0.8	(
Vorking population	-0.8	-0.6	1.0	1.3	2.0	1
Inemployed labour force (x thousand persons)	647	660	614	538	445	4
nemployed labour force (in % of labour force)	7.3	7.4	6.9	6.0	4.9	4
larket sector (b)						
roduction	-0.7	2.4	2.8	2.6	2.8	2
abour productivity (per hour)	0.4	1.6	1.6	0.3	1.0	
mployment (in hours)	-1.1	0.8	1.2	2.3	1.9	(
Vage rate (per hour)	1.7	0.8	0.2	1.6	2.6	2
abour income share (in %)	79.1	78.7	77.1	77.7	78.3	78
Other						
ndividual saving share (in % disposable income) (c)	-0.7	-1.4	0.2	0.9	0.0	(
Balance current accounts (in % of GDP)	10.2	8.5	8.5	8.7	8.2	8
	level in % of GDP					
ublic sector	10 101 111	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,				
MU balance	-2.4	-2.3	-2.0	0.3	0.5	(
MU debt (ultimo year)	67.7	67.9	65.1	61.8	58.5	55
collective financial burden	36.5	37.5	37.7	39.0	39.3	39
a) Goods and services, excluding natural resources and fuels.						

Chapter 1 of the MEV2017.

The increase in private consumption will be rapid this year, easing back a little the next year, as the 5-billion-euro package will have been spent and increasing inflation will be dampening purchasing power. Corporate investments will increase this year and the next, compared to 2016 levels. However, for next year, the growth in housing investments is expected to decline, whereas exports will continue to do well, in both years, also compared

to relevant world trade levels. Production growth will be achieved more or less fully in the market sector. The heath care sector, in contrast to previous years, will make a positive contribution to the growth in added value, in both years. This year, a lower natural gas production level will still dampen GDP growth by 0.2%, but this is no longer the case in 2018, due to unchanged production levels. The most important domestic uncertainties around the projections concern the developments in unemployment and exports. Unemployment could go down further than projected, if the increase in employment would be greater than currently expected. On the other side, there is the risk of labour supply increasing more rapidly, due to favourable labour market conditions, which in turn would increase unemployment (see text box). The relatively abundant growth in exports, compared with relevant world trade, could prove to be incidental, which would result in lower export levels than currently projected.

percentage points GDP growth 25 monthly figures (x 1000) 2.0 1.5 1.0 15 10 0.0 2014 -0.5 exports government spending business investments
 housing investments 2005 household consumption

Figure 1.2 Growth across the board (left); the number of housing market transactions has set a record (right)

The contribution of public spending to GDP growth only concerns the direct spending effects of government consumption and investments. Effects of other public expenditure, such as on income transfers and subsidies, may contribute to growth indirectly, via household spending and corporate spending. This could also apply to taxation.

Source: CBS, CPB calculations (link).

Consumption levels are believed to increase rapidly, this year, as a result of the reductions in spending among higher incomes, over the last years. Next year's consumption is projected to grow in line with the increase in disposable income. Over the last two years, the disposable income level has increased, substantially, among other things due to the reduction in tax burden achieved by the 5-billion-euro package of measures. Some of this additional income was not consumed in 2016, which caused a slight increase in the savings share. Disposable income is projected to increase further, both this year and the next, as the increase in employment will generate more income. Higher inflation, however, will dampen the increase in real wages, and social benefit incomes will decline, slightly, in both years, because there will be no indexation of pensions and a decrease in the number of recipients. In both years, although the increase in disposable income will be smaller compared to the last few years, a larger share of this increase will be consumed. The saving share will decline slightly, in both years (which, incidentally, will partly be due to the measure regarding personal pension fund management (*Pensioen in Eigen Beheer*<sup>2</sup>)).

<sup>&</sup>lt;sup>2</sup> See the text box in Chapter 1 of the *Macro Economic Outlook* 2017.

Pension premiums, on average, will increase this year, and stabilise next year. Premium increases are partly due to the lower solvency ratios caused by lower interest rates. In the public sector, however, premiums are expected to increase in 2018, as well. On average, there will be no pension reductions or indexations.

Developments on the housing market are positive and will contribute to GDP growth. House prices, last year, increased by 5.0%, causing prices to be nearly 15% higher today than at their lowest point in 2013. The increase in housing prices of 2017 is projected to continue in 2018. Transaction numbers reached their highest level since 2005 in the second half of 2016 (Figure 1.2, on the right). Housing investments grew over the past year by about 20%. This rate of increase will normalise over the course of both this year and the next, to 6.6% and 2.9% respectively. The growing number of transactions in existing houses will provide an impulse for renovation, restauration and repair work.

Corporate investments are projected to grow, both this year and the next, by around 2.5%. Capacity utilisation will be at the multi-annual average, and the investment share will remain stable. SME access to banking credit continues to be limited, following the more stringent acceptance criteria for loans to SMEs, in previous years.

Dutch exports of goods are relatively positive and, since a few years, have been increasing more rapidly than relevant world trade. This applies both to re-exports and the export of domestic products. Exports benefit from an improved competitive position, which will also increase slightly, this year, because of the depreciation of the euro. Exports continue to increase over the projected period, although compared to the growth in relevant world trade, the difference will become smaller.

Figure 1.3 Employment, labour supply and unemployment (left); purchasing power increase is waning (right)

Source: CBS, CPB calculations (link).

The growth in market-sector employment will continue, and will also grow in the health care sector; unemployment will decrease from 6.0% of the labour force in 2016, to 4.9% in 2017 and 4.7% in 2018 (Figure 1.3, on the left). Over the projected period, the increase in employment (hours worked) will decline, to a certain degree, under increasing productivity.

#### Uncertain developments on the labour market

In the recent past, rapid developments on the labour market continued to surprise, and unemployment proved to decrease more rapidly than expected by CPB and other institutes. Employment and labour supply both developed in a way that is atypical during a period of economic recovery, and they were therefore difficult to project (a). Two variants illustrate the related uncertainties for unemployment projections.

#### Higher growth in employment

In the last two years, employment increased, substantially. Relatively high profits enabled companies to hire new staff. However, a tighter labour market means that finding suitable staff is becoming more and more difficult as well as more expensive. This will cause growth in employment to level off in the central projection. Employment is projected to see a slightly lower increase this year, compared to the previous year, and to level off even further in 2018.

This simulation assumes average employment growth in 2017 and 2018 to be similar to that of 2015 and 2016, which would mean an additional growth of 0.4 percentage points, in both years. Unemployment, in 2018, would thus be 0.5 percentage points below the central projection. Tightening of the labour market leads to higher wage levels, which in turn leads to higher inflation. The additional employment and real wage increases both stimulate consumption and, thus, economic growth. The EMU balance would improve, due to lower expenditure on unemployment benefit payments and higher wage and income tax revenues.

#### Discouraged workers returning to the labour market

During the crisis, people have become discouraged and withdrew from the labour market. When the economy improves and unemployment declines, these people may be expected to return to the labour market. Over the last three years, unemployment decreased from 7.4% of the labour force, to 5.3% in late 2016. And, yet, only few of these discouraged workers have returned to the labour market. This development is extrapolated in the central projection, and, therefore, the return of this economic labour supply is expected to be only limited in the coming two years.

Under this simulation, it is assumed that positive circumstances encourage more discouraged workers to enter the labour market, in 2017 and 2018, and both this year and the next, around 30,000 people return to the labour market. This will cause an increase in unemployment of 0.7 percentage points in 2018. The higher unemployment will reduce some of the wage pressure. Lower real wages lead to less consumption and, thus, to a slowdown in economic growth. This would also decrease the EMU balance. In the long run the extra labour supply will find a job and tax income increases. In this case, the group of discouraged workers returns sooner to the labour market than in the central projection. Long-run effects on the economy and the government balance are neutral.

#### Consequences of increases in employment and labour supply for economic development

	Employment i	ncreases	Return of di	Return of discouraged workers		
	2017	2018	2017	2018		
effect on a	nnual mutations i	n percentage poi	nts, compared to the	ne baseline		
Gross Domestic Product	0.0	0.1	0.0	-0.1		
Household consumption	0.1	0.2	0.0	-0.1		
Investments (including stocks)	-0.1	0.1	0.0	-0.1		
Consumer Price Index (CPI)	0.0	0.1	0.0	-0.1		
Contract wages market sector	0.1	0.2	-0.1	-0.3		
Employment market sector, in hours worked	0.4	0.4	0.0	0.0		
Labour productivity market sector, in hours worked	-0.4	-0.3	0.0	-0.1		
Labour supply	0.0	0.1	0.4	0.3		
Unemployed labour force (in %)	-0.3	-0.5	0.4	0.7		
EMU balance (% of GDP)	0.1	0.2	-0.1	-0.2		

Last year, the growth in employment was remarkably high and productivity relatively low. Over the projection period, the ratio between these two is expected to normalise, causing a slight slowdown in employment growth. This growth will take place in the market sector and in health care, and will be more than sufficient to absorb this year's labour supply. The increase in labour supply is greater over the projection period than it has been during the last years, due to structural factors such as higher levels of participation by women and older people, as well as policy effects (raise in state-pension age, 5-billion-euro package of measures). The increase in employment in the market sector will slow down, next year, combined with an increase in labour supply that is more or less equal to this year's increase. Next year's decrease in unemployment, therefore, will be smaller than that of this year.

The decrease in unemployment and increase in inflation will lead to more upward pressure on wages. The rise in contract wages will increase from 1.8% this year, to 2.1% in 2018. This year's rise remains limited, because many of the Dutch collective labour agreements (CAOs) were already concluded last year, which means that the higher inflation has not yet been incorporated into those CAOs for 2017. Real wages in the market sector will increase by more than labour productivity, under relatively high corporate profits. At the same time, inflation (the Harmonised Index of Consumer Prices (HICP)), with 1.6% this year and 1.4% next year, will be substantially higher than over the last years. This is particularly the result of higher energy prices and the depreciation of the euro against to the US dollar. Dutch inflation will be in line with that of the eurozone, in both years. This year, in particular, contract wage increases will not be much above the inflation level, limiting the positive impulse on median household purchasing power, which is also the case next year, albeit to a slightly lower degree. After the positive impact of the 5-billion-euro package of measures on last year's purchasing power, the increase in purchasing power will be less this year and next year (Figure 1.3, on the right).

#### **Public finances**

The surplus in 2016 is estimated at 0.3% GDP. This surplus is projected to increase this year to 0.5% and next year to 0.8%. The recent rapid increase in the government balance was mostly due to strong increases in tax revenues. This is partly due to the contribution to economic growth by relatively highly taxed domestic spending. Furthermore, there was also a sharp increase in corporation tax (excluding natural gas production), from 0.7% of GDP to 3.0%. Part of this increase has a structural character, because of increased company profits and due to the fact that companies appear to have almost no more compensable losses. Another part is only temporary, because of provisional tax assessments by the Dutch Tax Administration. On the side of spending, there is also an incidental factor that causes a temporary improvement in the budgeting balance, namely the Dutch deductions on EU payments, which will be received retrospectively (0.3% of GDP). The improvement to the budgeting balance is dampened by declining natural gas revenues, as a result of lower production levels and lower prices. The budget surplus is projected to increase even further, over the projected period. This is due to the continued economic growth, which reduces unemployment benefit payments, and is due to higher tax revenues and government spending that increases less rapidly than GDP. The budget surplus also increases because of

declining interest rate expenditures, and the temporarily higher tax revenues, due to fiscal adjustments related to personal pension fund management.

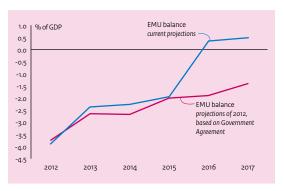


Figure 1.4 Government financial balance, compared against the Government Agreement

Source: CBS, CPB calculations (link).

Development of the budgeting balance was particularly more favourable in 2016 than expected at the time of the Government Agreement (Figure 1.4). This can mostly be attributed to windfalls in tax revenues. Lower expenditures on interest rate payments contributed also to the positive budgeting balance. With regard to other expenditure categories, higher and lower expenditures vis a vis the expectations at the time of the Government Agreement cancel each other out.

The structural budgeting balance is projected to result in a surplus for both 2017 and 2018. This brings the structural balance above the medium-term objective (MTO) of -0.5% of GDP.

In 2017, for the first time since 2010, the gross government debt — at 58.5% of GDP — will be below the Maastricht Treaty maximum of 60% of GDP. The Dutch Government debt will decrease further in 2018, to 55.5% of GDP, because of the budget surplus, financial transactions, such as the privatisation of ABN AMRO, and the denominator effect as a result of the increase in GDP.

## 1.2 Analysis

#### Those were the days

2017 will be the third year in a row with 2% growth — is this good or bad news? Over the 30 years preceding the Great Recession, the Netherlands experienced a long period of higher economic growth: average growth was  $2\frac{1}{2}\%$ , with peaks of around 5%. Not only was aggregate economic growth high, income per capita, which is a more relevant measure for individual living standards, also grew by about  $1\frac{3}{4}\%$  per year. Now that this country is definitely leaving the recession behind, the question arises of whether the old days of  $2\frac{1}{2}\%$  growth will return, or if structurally lower growth should be anticipated. And what are the implications of lower growth? Would it simply imply less rapid improvements in living

standards or does lower or near zero economic growth raise new questions? What if 'one-point-something' becomes the new normal?

An ageing population and less growth in labour market participation will put pressure on the labour force and, thus, eventually also on the increase in employment. The increase in the working-age population is slowing down, and is mostly kept at a certain level through gradual increases in the statutory retirement age (see Figure 1.5, on the left). The increase in labour participation by women is expected to slow down, over the coming years. CPB's study on population ageing (2014), therefore, assumes a stable labour force — increasing up to 2025 and decreasing thereafter — for the period up to 2040. The increase in employment, in hours, will lag behind, because of an average shorter working week. The future labour force is expected to be more or less stable; the days of more than 1% employment growth are over. Therefore, for economic growth, we depend on productivity increases. Income growth per capita, in addition, also benefits from a slight increase in the degree of participation.

Uncertain factors regarding labour force growth relate to migration, participation by women and older people, and part-time workers. In the coming decades, a positive net flow of migrants may contribute to an increase in labour force. Increased migration, thus, may stimulate economic growth, but will have an uncertain impact on income per capita. A contributing aspect, in this respect, is the degree of participation by women and older people. The increase in the participation by women is expected to level off and to lag behind that of men. Participation by older people will increase, partly as a result of the increase in the statutory retirement age. Furthermore, also a smaller decrease in the average number of hours worked will contribute to an increase in the income per capita.

Labour supply stable in the coming decade (left) and declining growth trend in labour

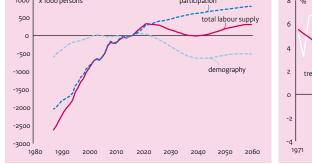


Figure 1.3



In the future, economic growth will likely be generated mostly from labour productivity. However, any optimism about this aspect is being tempered by recent history. A recent CPB Communication by Grabska et al.  $(2017)^3$  shows that labour productivity growth in the Netherlands has been on the decline since the 1970s, and slowed down even further, after a notable bump around 2000 (Figure 1.5, on the right). The bump and subsequent slowdown were not only caused by economic factors, such as economic cycles, the Great Recession or the banking crisis, but also seem to be strongly connected to the ICT revolution. Future

<sup>&</sup>lt;sup>3</sup> CPB, 2017, Productivity Slowdown, Evidence for the Netherlands, Communication 9 March 2017 (<u>link</u>).

productivity growth mainly will be determined by technological development, rather than economic recovery. Without new technological breakthroughs, annual productivity growth will level off at 1% to 1.5% — or decrease even further. In combination with a more or less stable labour force, an economic growth percentage that starts with the figure '1' can be expected to become the new normal.

As is the case for labour market participation, productivity growth also has a number of uncertain factors, such as new technological developments, the return on education, physical investments, and the effectuation of structural reform. On the positive side, Acemoglu and Restrepo (2017) speak of the opportunities provided by robotisation in countries where labour is scarce but capital is abundantly available. Others, however, point to the negative impact of population ageing on productivity growth, and conclude that the economic benefit of an increasingly more educated labour force has its natural limits.

However, if, under a stable increase in population, productivity growth is lower than expected, potential economic growth will come under pressure, in the coming decades. Such a situation would have a number of possible implications. Recessions may take place more frequently and last longer as a result of lower average growth, possibly with adverse effects on long-term growth. In addition, lower structural growth will involve lower real interest rates, redistribution will be more difficult, and the government budget will also be affected.

Lower growth levels will result in more frequently occurring recessions, with the zero lower bound coming into view, more often. Fluctuations are of all ages. 'Lean' years will also occur in times of average high potential growth. Over the past five decades, for example, economic growth was 1.5 percentage point below the 10-year average, on eight separate occasions. And a meagre 1 percentage point growth below average, generally, occurs twice per decade. Two years of recession per decade is something we experienced during the Great Recession, but not in the preceding period. And yet, this may become the new normal, if average annual growth does not rise above 1% to 1.5%. Here, it must be noted that, given hardly any population growth or even shrinkage, the consequences of a recession will be less severe, per head of the population, than in the past.

Recessions will not only happen more frequently, they will also last longer. Assuming that risks, and thus magnitudes, of negative shocks will be similar to those in the past, the periods of recovery will be longer under lower average growth. In the 1980s, it took only one year for the economy to return to its old level, after two years of recession. In the future, under low average growth, it will take a number of years for the economy to recover from a recession and get back to its pre-recession level.

There are indications that recessions are followed by longer periods of lower growth.<sup>5</sup> This applies not only to financial crises, but to 70% of recessions. Whether the impact is

<sup>&</sup>lt;sup>4</sup> CPB, 2015, Toekomstverkenning Welvaart en Leefomgeving (WLO) 2015 [Future outlook on welfare, prosperity and the human environment (in Dutch)], (link)

<sup>&</sup>lt;sup>5</sup> See Blanchard, O., G. Lorenzoni and J.P. L'Huillier, 2017, Short-Run Effects of Lower Productivity Growth. A Twist on the Secular Stagnation Hypothesise. NBER Working Paper 23160 (link) and Cerra, V. and S. Sexena, Booms, crises and

comparable for all countries — the Netherlands, in particular — is debatable.<sup>6</sup> The explanation, however, can be twofold. One is that of hysteresis; temporary shocks have permanent consequences. For example, because people are out of the labour force for too long and, therefore, lose part of their relevant knowledge and experience. In periods of low economic growth, investment levels may be low and, thus, slow down new technological development. Whatever the reason for hysteresis, the prevention of recessions or the stimulation of a rapid recovery will have a permanent, positive impact on the economy. However, the opposite may also be true; unfavourable prospects for structural growth may lead to lower investments, less labour demand among companies, additional spending cuts, and lower consumer spending — thus, resulting in the start of a recession. From a policy perspective, this means that temporary stimulation measures will not have a lasting impact, and that, in contrast, an increase in potential growth may have positive effects that become apparent already in the short term.

Lower growth, certainly in the longer term, is coupled to lower real interest rates. In combination with a moderate inflation target, the nominal interest rate will also be lower, on average — which means that, in case of a new recession, the zero lower bound will be binding at an earlier point in time. Under such conditions, it is more difficult to correct the economy by way of monetary policy. A second consequence of the low interest rate would be that investors look more actively for higher returns and are prepared to take higher risks. This may have negative consequences for economic stability. After all, a lower interest rate has an adverse effect on the solvency ratio of pension funds, particularly on premiums and pension payments and, therefore, on redistribution.

Lower growth has an impact on redistribution; a smaller pie makes it more difficult to ensure purchasing power will remain at a certain level for everyone. If productivity growth is lower, the numbers are also unfavourable for purchasing power. This is certainly the case in times of recession, but also under moderate positive growth it will be more difficult to improve purchasing power for all income groups. Moreover, a decline in the solvency ratio of pension funds would include higher premiums and/or lower pension payments. This affects the purchasing power of both working people and pensioners.

Without being exhaustive, lower growth ultimately has consequences for the government budget. Government revenues, in the form of taxation and premiums, will decrease. This is also true for some of the expenditures; the government would benefit from a lower interest rate and lower increase in contract wages. But, overall, the government will need to cut its coat according to its cloth. For a government budget to be sustainable, this calls for expenditures to be in line with economic growth. Assuming that government revenues and expenditures increase together with macroeconomic productivity, even lower productivity is beneficial for a sustainable budget. However, if, for example, the development of new or more expensive treatments in health care continues, thus causing cost developments to be

recoveries, IMF (link). The notable aspect of this research is that it focuses explicitly on recessions; the question of whether periods of economic boom are also followed by high economic growth, is not being answered.

<sup>&</sup>lt;sup>6</sup> CPB 2014, Roads to Recovery (link) finds no indication of hysteresis in the Netherlands.

out of sync with the rest of the economy, lower economic growth would once again present the government with large challenges. And finally, lower growth will have an adverse effect on the debt ratio, which can be reduced by less through nominal GDP growth (the denominator effect), but instead will have to come from a budget surplus.

Lower economic growth is what is in store, not only for the Netherlands, but for many western countries that are experiencing a combination of an ageing population and decreasing productivity growth. The government means to stimulate potential growth are limited. Immigration may lead to higher growth, but incomes per capita can only increase by attracting workers who are capable of more than average productivity. Stimulating labour participation (particularly in hours) may also lead to higher income growth per capita. Both options do have implications outside that narrowly defined economic realm. Migration poses issues around integration, increased labour participation is at the expense of leisure time, which in turn can then no longer be spent on caring for family members, volunteer work or hobbies. Productivity growth involves both opportunities and threats related to climate; opportunities in terms of new technologies, and threats because of higher emission levels. Investing in people, knowledge, and innovation may lead to higher productivity, but effective policy in this area is intractable.

Those were the days, the days of high economic growth. For the coming decades, Dutch growth potential is lower than it was in the years preceding the financial and economic crises. Growth figures of 3%, 4% or even 5% are a thing of the past. This is the result, among other things, of population ageing and declining productivity growth. Added to that is the fact that governments have only few opportunities to stimulate potential growth, and doing so, for example, through immigration or labour participation also has its disadvantages.