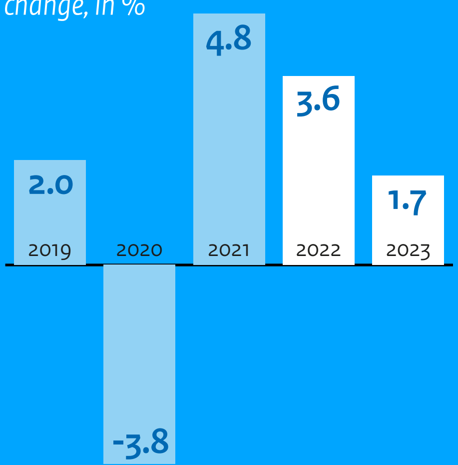
CPB Netherlands Bureau for Economic Policy Analysis

Central Economic Plan 2022

The war in Ukraine leads to a large amount of suffering as well as uncertainty. Higher energy prices have an unequal impact on purchasing power. At the same time, the Dutch economy is growing and the labour market remains tight.

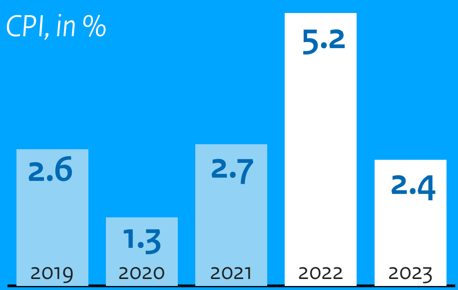
Economic development

change, in %



Inflation

CPI, in %



The budget deficit decreases, this year, due to the expiration of corona support measures and economic growth. *Because of additional spending, the decrease will not continue over the coming years. Over 2026–2030, the deficit will reach more than 3% of GDP.*

Spotlight

High inflation has unequal impact

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Economic interwovenness with Russia is very limited page 3

Budgetary and economic outlook to 2030

page 15

CPB Projections

March 2022

Central Economic Plan 2022-2023

War in Ukraine

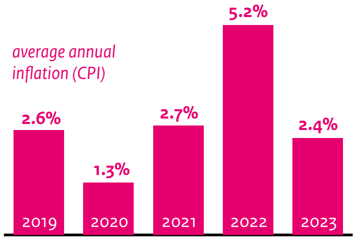
Russia's invasion of Ukraine brings with it a great deal of human suffering and uncertainty. The main economic consequence is a higher energy price, and thus even higher inflation

Corona

The global economic shocks caused by the corona pandemic have left their mark in the rising inflation

Inflation

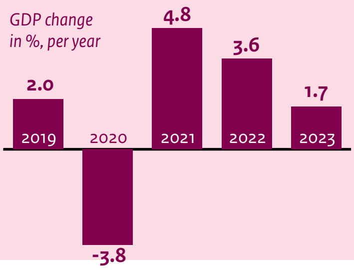
The additional increase in energy prices comes on top of an already significant inflation, partly due to the economic shocks of the coronavirus pandemic



energy costs will vary, substantially, between households, depending on their energy consumption and type of energy contract, amongst other things

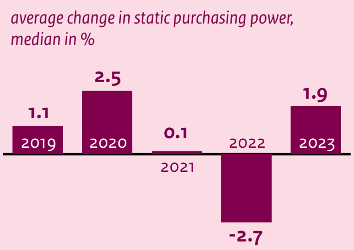
Economic growth

The course of the coronavirus pandemic remains relevant to the development of economic growth, but its importance is diminishing



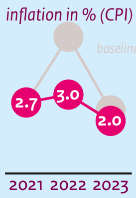
Static purchasing power

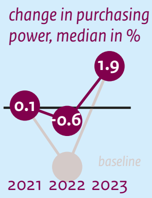
The inflation is eroding purchasing power. There are large differences underlying the development of purchasing power, see special topic: **'Inflation inequality'**, page 12



Lower inflation

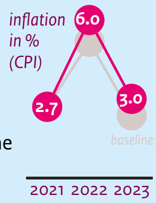
Under the lower inflation scenario, this summer, energy prices will return to those of the summer of 2019

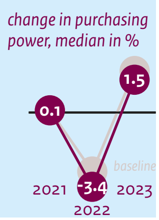




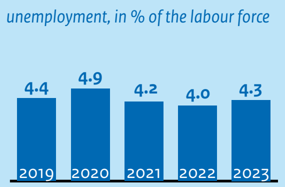
Higher inflation

Under the higher inflation scenario, in 2022 and 2023, energy prices will remain at the level of January 2022



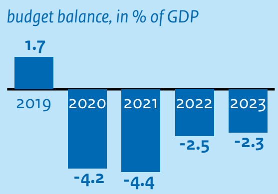


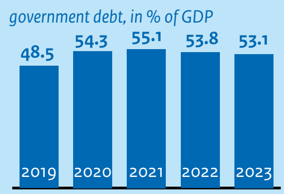
Unemployment



The labour market remains tight

Government finance





The deficit will decrease in 2022, due to expiration of support measures and economic growth. This decrease will not continue, due to additional government expenditure

The impact of the capital gains tax ruling is as yet unclear and, therefore, included to only a very limited extent in these projections

Consequences of the war in Ukraine

The incursion of Russian troops into Ukraine is already causing much human suffering. In addition, there are also economic consequences. The war and subsequent sanctions are indirectly inflicting economic damage on Europe, in a number of ways.

Higher energy prices create the largest effect. European natural gas prices had already risen sharply and the war is expected to push prices up further. The threat alone of natural gas shortages may also lead to very high prices, in the short term. In addition, higher energy prices indirectly cause higher inflation, as producers with energy-intensive production processes and high consumption levels of natural gas will compensate for the higher energy prices by raising consumer prices. The text box on inflation in this CEP report shows that, if energy prices remain high and lead to 0.8 and 0.6 percentage points higher inflation in 2022 and 2023, respectively, consumption levels will drop, causing lower GDP growth by a respective 0.1 and 0.3 percentage points.

Should the natural gas supply from Russia become restricted, this will have a major economic impact. The Netherlands depends on Russian natural gas for about 15%, in the European Union as a whole this is almost 44%. In addition, Russia supplies almost 26% of the oil used in the European Union.[a] For now, the supply seems to continue, but, should Russia decide to cut off the gas supply, or if the European Union should decide to buy less Russian gas, households and businesses could face serious problems. The natural gas reserves for 2022 are relatively limited and there are not enough alternative sources available, in the short term. If stocks are not sufficiently replenished by next summer, prices will continue to rise. This will particularly affect low- and middle-income households. In addition, companies may be confronted with rationing. Companies that use large amounts of natural gas include small businesses, such as bakeries and horticultural growers, as well as a number of large artificial fertiliser producers and steel companies. Under very serious scenarios, certain companies may even face a production stop.

Because Russia and Ukraine are not major trading partners of the Netherlands or the European Union, the damage of a disruption in trade flows will be limited on a macro level, but individual companies may be affected. Dutch trade with Russia and Ukraine is less than 3% of its total trade (Figure 1, right-hand side). For the European Union, trade levels are somewhat higher but still not very large, with 4% to 7.5%. Dutch exports to Russia and Ukraine consist mainly of machinery, and, to a lesser extent, of pharmaceutical products and flowers. About 90% of what the Netherlands imports from Russia consist of natural gas and oil, and about 75% of what it imports from Ukraine consists of cereals. This also applies to the European Union as a whole. The fact that the economic damage related to trade seems to be limited does not mean that there is no damage at all. Individual companies for whom Russia or Ukraine is an important trading partner or who rely on crucial inputs from the region may be significantly affected, in the short term. For example, Ukraine supplies 50% of the global production of neon gas and 40% of krypton, both of which are used in the production of computer chips and semiconductors.[b] In the short term, shortages will lead to supply problems and higher prices. Alternative markets or suppliers may offer a solution, in the longer term.

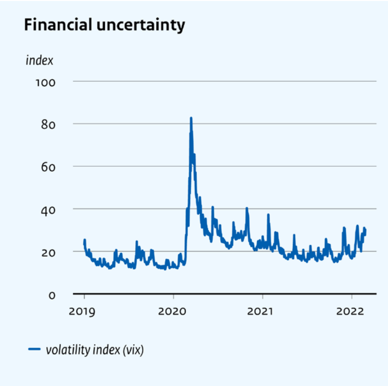
For now, the financial isolation of the Russian economy will have a limited impact on the Dutch economy and that of Europe. The assets of a number of Russian banks have been frozen and Russia has been excluded from the SWIFT payment system. This makes it difficult for Russia to obtain foreign currency, for example, used for importing products or making payments via SWIFT. The sale of natural gas and oil is now their main source of foreign currency. Turning off the natural gas supply would also cut off this source for Russia itself.

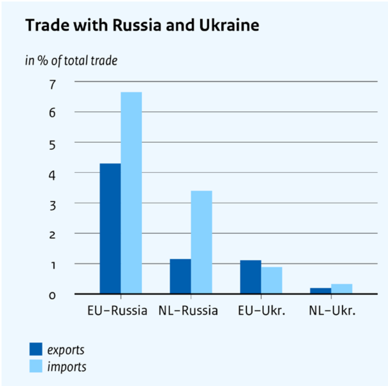
With little or no payments currently being made to Russian parties, a number of European banks with large claims (loans to Russian parties, holdings of Russian debt and the like) or liabilities (loans obtained from Russian parties, deposits by Russian parties) have run into trouble. For the time being, there are no indications of the financial system as a whole not being able to absorb this shock. Nor does the Dutch financial sector seem to be in the danger zone, yet. Dutch banks are well capitalised and insurance companies and pension funds have comfortably passed the financial stress tests. Dutch exposure to Russia appears to be limited, so far.

The war is leading to more uncertainty, which may have economic consequences. Uncertainty on global financial markets (measured by the financial uncertainty index (VIX), see Figure 1) has increased sharply, but by no more than was the case for a number of other uncertainty peaks of before the incursion. The prices on European stock exchanges, however, have reacted more violently, with sharp drops in the exchange rates. This reflects the uncertainty in Europe, which can spill over into the real economy, for example through lower investments— see the earlier CPB text box on the Ukraine conflict of 2014 (link). Uncertainty about the course of the war can also seriously affect consumer confidence, in addition to causing a further rise in inflation. Declining consumer confidence often translates into a decrease in spending, which has a downward effect on economic growth. At the time of that earlier publication, a variant with high uncertainty was estimated to have a negative effect of 0.5% on Dutch GDP.

Finally, large migration flows into Europe will also call for adjustments. Shortly after the Russian invasion, a migration flow started of almost 1 million refugees from Ukraine. The European Union estimates that this flow may grow to 4 million people, some of whom will also come to the Netherlands.[c] Although Ukrainians will not be considered asylum seekers, this will have an impact in the way of initial shelter, housing and numbers of school pupils.

Figure 1 VIX (left) and trade flows between Russia, Ukraine, the Netherlands and the European Union (right)





Source: Chicago Board Options Exchange and Comtrade

a Financial Times (link)
b Eurostat (link)
c BBC (link)

1 Main data economic development 2022 and 2023

In brief

- → Uncertainty as a result of the war in Ukraine dominates economic projections
- → The greatest economic consequence for the Netherlands, currently, is an even higher energy price
- → Inflation this year will slash purchasing power, the energy costs will have very different impacts on different types of households
- → The labour market remains tight, and the coronavirus pandemic will have a declining impact on the economy
- → Government finances will stabilise this year, subsequently worsening particularly after 2025, as a result of additional spending related to the Coalition Agreement

Turbulent international developments are creating uncertainty and are having a major impact on energy prices. The Russian invasion of Ukraine has brought much human suffering, as well as uncertainty. The main economic consequence for the Netherlands is an even higher energy price.[1] Any long-term consequences are very uncertain and depend, amongst other things, on the scope of sanctions and countermeasures. The direct interwovenness of the Dutch economy with those of Russia and Ukraine is only limited, see the text box 'Consequences of the war in Ukraine'.

The higher natural gas and oil prices are adding to an already high inflation. Energy prices had already risen sharply before the incursion. The economic effects of the coronavirus pandemic have further pushed up inflation. The coronavirus waves of infections show a stop-and-start economic pattern. In addition, the pandemic also leads to shifts in demand, such as for more goods and fewer services. These shocks work their way into value chains and logistical processes, creating the effect of a whiplash: a sudden jolt on one end may cause a bump on the other end. In addition to this leading to rapidly increasing energy prices, it is also reflected in capacity problems in container transport and the production of semiconductors. The result has been a rapidly increasing inflation, worldwide.

What is clear is that inflation in 2022 will be high; scenarios have been constructed to reveal the uncertain development of the energy prices. The Dutch economy is relatively sensitive to the natural gas price, and now this price has risen sharply. As a result, current inflation in the Netherlands is amongst the highest in Europe. CPB bases its projection of energy prices largely on forward contracts, which are currently highly volatile. The baseline projections show a gradual decline in energy prices, although they will remain at a significantly higher level than before the coronavirus crisis. It is furthermore assumed that global logistical problems will continue until the end of the year. The once only reduction in the energy tax will have a temporary downward effect in 2022 and an opposite effect in 2023. This brings inflation (CPI) to 5.2% in 2022 and 2.4% in 2023. Under the low scenario, energy prices are assumed to quickly 'return' to their 2019 level. This

[1] These projections were finalised in week 3. The presented situation includes the initial response of energy market on the incursion of Russia into Ukraine.

provides insight into the effect on inflation of the higher energy prices included in the baseline projections. Under such a scenario, inflation will be 3% in 2022 and 2% in 2023. The high scenario assumes that energy prices remain at their January 2022 level throughout the projections period, in which case inflation will be 6% in 2022 and 3% in 2023. The text box 'Inflation scenarios' provides more information on the scenarios.

Inflation will this year cause a substantial reduction in purchasing power, but energy costs will vary greatly between households. The baseline projections and the scenarios all show a 2.7% increase in contract wages in the market sector in 2022. The high inflation rate and moderate wage increases result in a strong negative development of real wages in 2022. This can be seen in the purchasing power trend; on average, purchasing power declines by 2.7%. Under the low scenario, purchasing power decreases by 0.6%, whereas under the high scenario, this is 3.4%. The usual disclaimer that dispersion is underlying the purchasing power trend should this time be read with greater attention; the trend does not distinguish according to energy consumption or contract. For some households (low income, high consumption level, variable energy contract) the energy costs will rise much more steeply as a proportion of disposable income.

Generic repair of the consequences for the purchasing power runs up against implementation and economic constraints. Given the spread behind the purchasing power effects, an attempt at broad-based compensation is likely to be very ineffective — not everyone will need it, but, for those who do, it will be inadequate. Compensating for 'imported' inflation is also not very feasible from a macroeconomic perspective; it amounts to shifting the bill. A generic reduction in the financial burden without an increase elsewhere to cover it will shift the burden to the future and is also contrary to the applicable budgetary rules. At the same time, the spread also means that specific groups will be confronted with substantial, in some cases problematic, purchasing power effects. Targeted support for these households is desirable, but difficult to implement. The section on 'Inflation disparities' discusses the implications for various household groups in more detail.

With regard to inflation development, in addition to energy price developments, the question above all is to what extent the impact will spread and how it will affect wages. Higher energy and raw material prices are slowly leading to price increases in other product categories. This can currently be seen in food prices. The longer inflation lasts, the greater the likelihood of such a spread. High inflation could also persist for longer if a wage–price spiral were to take place; for example, if automatic price compensations were to be widely included in collective labour agreements. However, this is not common practice in the Netherlands; wage development is still moderate.

The projected purchasing power development after 2022 is more favourable due to higher wages and partial indexation of supplementary pensions.[2] Wage increases in 2023 and in the last years of the government's term in office will be higher than inflation. This reflects the fact that wages react to price increases with some delay, aided by the still tight labour market. Wages in the public sector and, from 2024 onwards, the national minimum wage (nmw) will increase in the coming years, as a result of the Coalition Agreement. Given the new rules[3] in the run-up to the new pension system, partial indexation of supplementary pensions has been assumed. In the baseline projections and under the low scenario, purchasing power will increase in 2023 by 1.9%, on average, and under the high scenario, this will be 1.5%. Over the entire government term, the average purchasing power development will be 0.3%.[4] For pensioners, average development is projected at 0.0%.

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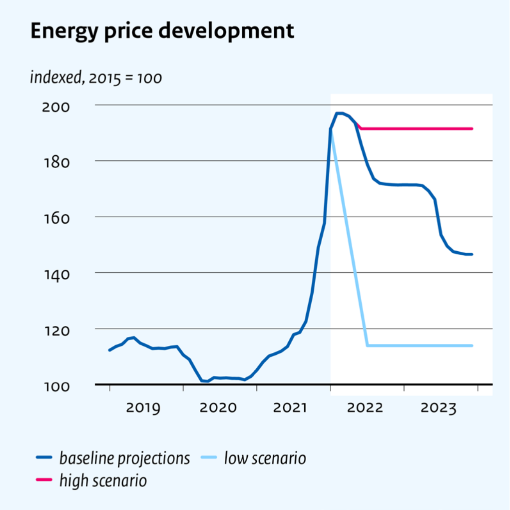
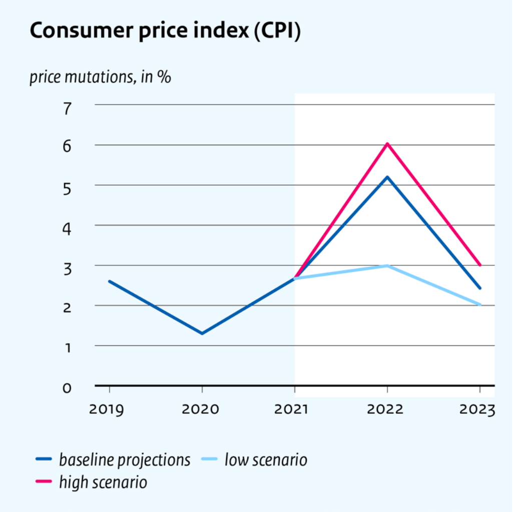
[2] Here too, it is worth remembering that there is a spread behind the trend: those who have to take out a new energy contract in 2023 will in fact experience inflation in that very year.
[3] Consultation Amendment to the Financial Assessment Framework (Pension Funds) related to allowance due to proposed transition (link).
[4] The scenarios were not extrapolated to the remainder of the government's term in office.

Inflation scenarios

Because of the great uncertainty about energy price developments, we calculated the impact on inflation in case this development differs from that in the baseline projections. The figure on the left shows the development of energy prices for consumers (energy including other fuels), under two scenarios and the baseline projections. Under the low scenario, energy prices this summer will return to their summer of 2019 level. Inflation (CPI) will be 2.2 percentage points lower in 2022 and 0.4 percentage points lower in 2023. Under the high scenario, energy prices in 2022 and 2023 remain at the level of the beginning of this year, while the baseline projections include a gradual decrease. These higher energy prices lead to 0.8 percentage points higher inflation in 2022 and 0.6 percentage points in 2023.





Higher or lower inflation affects purchasing power, as wages will not move to the same degree, in the short term. Under the low scenario, household purchasing power improves, compared to the baseline projections, despite lower wage growth in collective wage agreements (CAO), causing consumption to rise and GDP growth to be 0.6 and 0.9 percentage points higher in 2022 and 2023, respectively. Under the high scenario, higher inflation partly translates into higher wages, but real wages will decrease and the effect on purchasing power is negative. Because households have less to spend, consumption will decline and GDP growth will be 0.1 and 0.3 percentage points lower.

	2021	2022	2023	2022	2023	2022	2023
	baseline projections			low scenario		high scenario	
National consumer price index (CPI, %)	2.7	5.2	2.4	3.0	2.0	6.0	3.0
Gross domestic product (GDP, economic growth, %)	4.8	3.6	1.7	4.2	2.6	3.5	1.4
Household consumption (volume in %)	3.5	4.7	1.5	5.8	2.6	4.4	0.9
Investments (including stocks, volume in %)	-2.0	5.4	4.4	6.1	5.3	5.3	4.0
Exports of goods and services (volume in %)	6.9	4.9	4.3	5.0	4.5	4.9	4.2
CAO wages market sector (%)	2.1	2.7	3.5	2.7	3.2	2.7	3.7
Purchasing power; static; median all households (%)	0.1	-2.7	1.9	-0.6	1.9	-3.4	1.5
Unemployed labour force (level in %)	4.2	4.0	4.3	3.9	4.1	4.0	4.4

For the development of economic growth in the coming years, the course of the pandemic remains relevant, although its importance is diminishing. Economic growth following the lifting of restrictions, in the summer of 2021, was stronger than projected, but the lockdown at the end of that year caused a new slowdown in growth rate. It is uncertain whether new virus variants will again lead to large-scale restrictions, or whether the combination of acquired immunity and effective control will ensure that these are no longer necessary. In any case, the impact of successive lockdowns on the macro economy is diminishing: the growth slowdown is more limited, and recovery is always swift. The unaffected sectors have developed strongly, and the loss of turnover in the affected sectors has also been more limited than at the beginning of the pandemic.

The government's intention[5] to treat coronavirus-related restrictions more as a regular business risk is in line with this picture. Even — or, rather, particularly when — new lockdowns are necessary, the economic rationale for new government support is lacking, as such economic adjustment is not in relation to the remaining risks of the coronavirus.[6] Obviously, under such scenarios, the consequences for affected sectors are painful. At the same time, the current tight labour market may accelerate reallocation, and thus limit the consequences for workers.

We no longer assume there to be permanent macroeconomic damage from the coronavirus crisis. Initially, in line with previous shocks of this magnitude, it was expected that the pandemic would permanently shift the economic growth path to a lower level, mainly due to missed investments in human capital.[7] The strong recovery in 2021 makes it less likely that this effect will become reality; CPB now assumes — as do international institutions such as the IMF[8] — that the economy will return to its structural growth path of before the coronavirus pandemic. Underlying this, however, the pandemic may well have important economic effects, such as shifts in sectoral structure due to accelerated digitisation and reduced investment capacity in affected sectors due to compromised buffers. There are also concerns about the effects on general welfare, such as psychological problems and learning deficits amongst young people, as a result of school closures.

Economic growth will be 3.6% in 2022 and 1.7% in 2023, and the labour market remains tight. The strong recovery in 2021 is still statistically reflected in the annual figures for 2022. All spending categories contribute to recovery, the largest shares of which are in consumption and exports. In the coming years, growth will also be boosted by the additional spending announced in the Coalition Agreement, with an average 2.3% over this government's term in office. Partly as a result of the policy support measures, the labour market continued to be very tight during the economic contraction in 2020 and the recovery in 2021, and will remain so in the coming years. Unemployment will rise only slightly to 4.3% in 2023.

The projections of government finances carry major reservations; the effects of the Supreme Court ruling on the capital gains tax are unclear and, therefore, were only included to a very limited extent. The ruling has far-reaching consequences; it puts an end to the system used since 2017 and focuses on the future. At the time that these projections were compiled, the consequences for taxation in box 3 from 2021 onwards were still uncertain. They depend on the exact interpretation of the ruling, possibly emergency legislation and/or coverage of foregone means elsewhere in the budget. Given these uncertainties, the possible consequences of the ruling were not included in these projections, but instead they include the estimated revenues from box 3

5 Parliamentary letter, dated 8 February 2022, on the short-term approach to COVID-19 and long-term outlook (link): 'In the light of the fact that we will have to live with corona in the longer term, we must also conclude that the current generic support is not tenable for this longer term. This knowledge calls for a return to regular economic dynamics in which the coronavirus largely becomes part of the normal entrepreneurial risk.'

6 See Overvest and Elbourne (2022), Van coronasteun naar generiek beleid: Inzichten voor een langetermijnstrategie [From corona support to generic policy; insights for a long-term strategy (in Dutch)], (link).

7 See Elbourne et al. (2020), Blijvende economische schade van de coronacrisis [Lasting damage from the coronavirus crisis (in Dutch)], (link).

8 See IMF (2021), World Economic Outlook, (link)

of EUR 4.7 billion per year. Therefore, if the emergency legislation and/or additional coverage are not sufficient to compensate for the lost revenues, the consequences for government finances are potentially large. Moreover, if repair and coverage do not take place within the same domain, there may be disruptive effects on economic development and shifts in income distribution. Finally, it is clear that a group of savers will need to be compensated, but it is still unclear what the exact scope of the compensation should be. These projections assume only a minimum amount of compensation that, based on the collective ruling about the objections in the 2017–2020 period, will be unavoidable. A broader scope is also possible, depending on political decision-making.

The budget deficit will decrease this year due to the termination of the coronavirus support measures and economic growth, but will stabilise thereafter as a result of the expansionary budgetary policy from the Coalition Agreement. The termination of the coronavirus support policy and other corona-related expenditures and higher tax revenues will lead to a rapid improvement in the budget deficit in 2022, the deficit reaching 2.5% of GDP compared to 4.4% in 2021. The debt ratio decreases to 53.8% in 2022, due to a large 'denominator effect': inflation contributes to a strong increase in the nominal size of the economy. In the coming years, the budget deficit will not improve any further, as a result of additional expenditures under the Coalition Agreement. However, there is a caveat, here, as it is doubtful whether all of the planned spending increases can be realised, given the tight labour market and other capacity-related bottlenecks. For education, these projections assume that not all planned spending increases will be realised in 2022.

Deficit and debt will increase further, after the current government's term in office. The section 'Outlook to 2030' shows that the budget deficit will increase further after 2025, to 3.5% of GDP by 2030. This is because a number of proposed policies (including spending related to climate and nitrogen) will not be fully implemented until then, while GDP growth slows down due to smaller increases in the labour supply and the gradual cooling of the economy. In addition, ageing-related expenditure is expected to rise, such as on long-term care and state pensions (AOW). The debt ratio is projected to steadily increase to 61% by 2030, as a result of the high budget deficit and lower GDP growth.

Uncertainties around these projections are particularly related to international developments. In addition to the war in Ukraine, the risk of 'decoupling' from China, due to trade tensions and related uncertainty, still lingers. In addition, there is policy uncertainty due to the still very generous global monetary and fiscal policy, which has led to high prices for assets such as real estate and shares. If high inflation persists for longer than anticipated, monetary authorities in the United States and the eurozone may be forced to make abrupt policy adjustments, causing shocks to the financial system. The further increase in already high debt levels in many countries as a result of the pandemic has increased the sensitivity to such shocks.

Elaboration

On 16 March, CPB will publish an elaboration document complimentary to these projections. The publication will contain a technical description per sub-theme, as well as more information about assumptions and risks, as an elaboration to the main findings. Furthermore, it will provide an overview of the policy measures and how they were included in the CEP, in addition to a number of technical appendices.

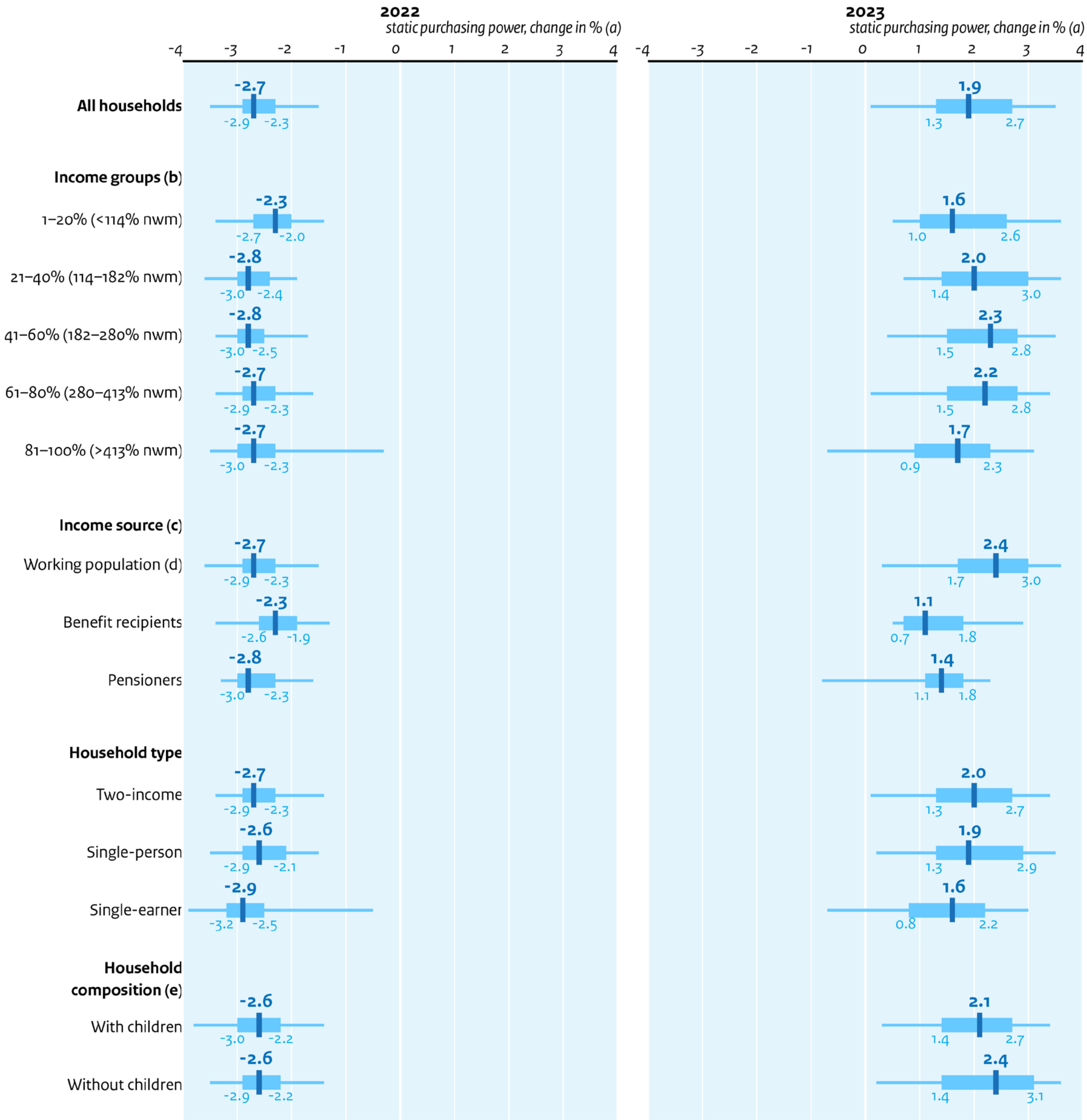
→ Click here for 'Elaboration Central Economic Plan 2022' (Dutch) (link active from 16 March onwards)

Table 1.1 Main data for the Netherlands, 2018–2023

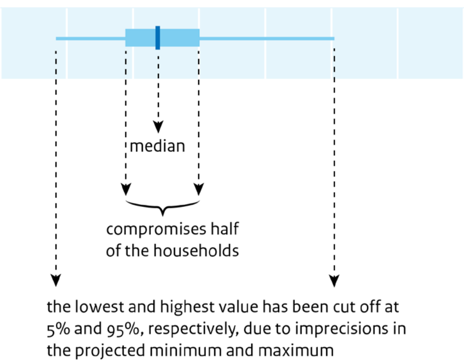
	2018	2019	2020	2021	2022	2023
	mutations per year, in %					
International economy						
Relevant world trade volume goods and services	3.8	4.2	-9.2	7.5	6.6	4.9
Competitor prices (a)	-1.4	3.5	-0.1	6.0	4.7	1.2
Oil price (in USD per barrel)	70.9	64.3	41.8	70.7	91.3	83.1
Euro exchange rate (USD per euro)	1.18	1.12	1.14	1.18	1.14	1.14
Long-term interest rate, the Netherlands (level in %)	0.6	-0.1	-0.4	-0.3	0.0	0.1
Volume GDP and spending						
Gross Domestic Product (GDP, economic growth)	2.4	2.0	-3.8	4.8	3.6	1.7
Household consumption	2.2	0.9	-6.6	3.5	4.7	1.5
Government consumption	1.7	2.8	1.0	7.1	1.7	2.6
Investments (including stocks)	3.9	7.7	-5.4	-2.0	5.4	4.4
Export of goods and services	4.3	2.0	-4.8	6.9	4.9	4.3
Import of goods and services	4.7	3.2	-5.5	5.2	5.5	5.5
Prices, wages and purchasing power						
Price level Gross Domestic Product	2.4	3.0	2.3	2.5	3.4	3.0
Export prices goods and services, excluding energy	0.9	1.0	-0.4	5.4	5.3	1.4
Price levels imported goods	2.2	-0.2	-3.4	10.2	9.2	0.0
Inflation, national consumer price index (CPI)	1.7	2.6	1.3	2.7	5.2	2.4
Inflation, Harmonised Index of Consumer Prices (HICP)	1.6	2.7	1.1	2.8	5.9	2.2
Wage rate business sector (per hour) (c)	1.9	2.6	7.6	-0.2	2.3	3.4
Collective labour agreement (CAO) wages, companies	2.0	2.4	2.8	2.2	2.8	3.5
Purchasing power, static, median all households	0.0	1.1	2.5	0.1	-2.7	1.9
Labour market						
Labour force	1.2	1.5	0.4	0.8	0.8	1.0
Working population	2.2	2.0	0.0	1.5	1.0	0.7
Unemployed labour force (x thousand persons)	459	423	465	408	385	425
Unemployed labour force (in %)	4.9	4.4	4.9	4.2	4.0	4.3
Employment (in hours)	2.7	2.1	-2.7	2.2	2.9	0.9
Other						
Labour income share (in %)	73.6	73.9	74.9	72.2	70.7	71.1
Labour productivity business sector (per hour)	-0.1	0.0	-1.3	3.3	0.9	0.8
Individual saving share (in % disposable income) (b)	4.0	4.5	11.6	8.7	4.1	4.6
Balance current accounts (in % of GDP)	10.8	9.4	7.0	9.4	9.8	9.1
	in % of GDP					
Public sector						
EMU balance	1.4	1.7	-4.2	-4.4	-2.5	-2.3
EMU debt (end of year)	52.4	48.5	54.3	55.1	53.8	53.1
Public financial burden	38.8	39.3	39.7	39.5	38.6	39.1
Gross public expenditure	42.8	42.4	48.4	47.5	45.1	45.1

(a) Goods and services, excluding natural resources and fuels.
(b) Level; disposable household income includes public savings.
(c) The NOW wage cost subsidy and the continuity contribution in health care will have an upward effect of 3.3 percentage points on wage rate mutations in the business sector in 2020, and a downward effect of 2 percentage points in 2021, 0.9 percentage points in 2022 and 0.3 percentage points in 2023.

Figure 1.1 Purchasing power development 2022, 2023 (NB: excluding spread due to energy use, page 13)



How to read the table?



The 'median' is the middle value of a series of figures, ordered from low to high. A median purchasing power development of 1.3% for all households means that, for half of them, purchasing power development will be 1.3% or less, while, for the other half, it will be 1.3% or more. For half of the households, purchasing power development will be within the blue bar, with one quarter below and one quarter above the median. For the other half, purchasing power development will be outside this range. The box plot's whiskers show the lowest en highest development in purchasing power.

(a) Not including indicental changes in income.
(b) Gross labour income or welfare benefits on household level; the national minimum wage (nwm) in 2022 is around 22,558 euros. Income groups have been divided into five groups of equal size in ascending order of income, each containing 20% of all households.
(c) The categorisation according to source of income is based on the highest income source per household, with households of which the main income is derived from investments or products having been categorised under the employed. Households on early retirement income or student grants as their main source of income have been excluded.
(d) Changes in purchasing power for the employed do not include incidental wage changes, such as bonuses received or lost.
(e) The categorisation according to household composition is based on the presence of children of up to eighteen years and excludes pensioner households.

2 Inflation inequality

The inflation projections conceal, more so than in other years, the large differences between households with respect to cost increases. For the coming years, energy prices are expected to remain higher. All households will therefore be affected by a substantial rise in costs. Those who were already spending a relatively large amount on energy will be facing the largest cost increases. The government cannot compensate this reduction in purchasing power without increasing the financial burden elsewhere. Redistributing this burden in the short term and reducing the energy demand in the longer term are among the policy options.

The increase in the consumer price index (CPI) is largely due to the rapid rise in energy prices. The increase in the CPI, since this autumn, is mainly due to a sudden and persistent increase in the price of energy, particularly natural gas, but also electricity and other fuels. Because there are large differences between households in the amount they spend on energy, they will also differ in how they experience inflation.[9]

Energy prices are likely to remain at a higher level. Predicting the future price of energy is difficult, given the volatility of energy markets. These markets have become much more volatile due to a reorganisation of the European energy market. There are more short-term contracts than ever before, and in the past decade, there has been less of a coupling between natural gas price and oil prices. In addition, the Russian invasion of Ukraine is causing great uncertainty. More volatile gas prices are, in turn, also leading to erratic electricity prices because of the increased role of natural gas as a flexible source for electricity generation.[10] Based on structural analyses, it is expected that energy prices, over the coming years, will be higher than in the pre-COVID-19 period. In addition, the price of energy and in particular natural gas is expected to fluctuate more than in the past.[11] Based on market expectations, CPB's baseline projections assume a gradual decrease in energy prices. Ultimately, however, prices will remain at a considerably higher level than before the coronavirus pandemic.

Under permanently higher energy prices, all households will have to pay more for their energy. The increase in energy prices affects households at different moments in time, depending on the type of contract they have with their energy supplier. In April 2021, 61% of households had a contract in which the prices were fixed for up to one year.[12] In calculating the CPI, Statistics Netherlands (CBS) assumes a direct adjustment of energy prices for consumers. This reflects the inflation as perceived by households that have recently entered into a new energy contract. Given the expectation of permanently higher energy prices, many of the other households will also experience an increase in the cost of living when they need to sign a new contract. The following analysis attempts to determine the magnitude of this increase, without stating exactly when this will occur.

Lower income groups will face a relatively greater increase in the cost of living. The expected increase (in percentages) varies greatly between households. We combined data on energy consumption with data on disposable income in 2021 to calculate the expected increase in the cost of living (Figure 2.1). The figure shows the additional amount that households would spend on energy if prices were to triple from their January 2021

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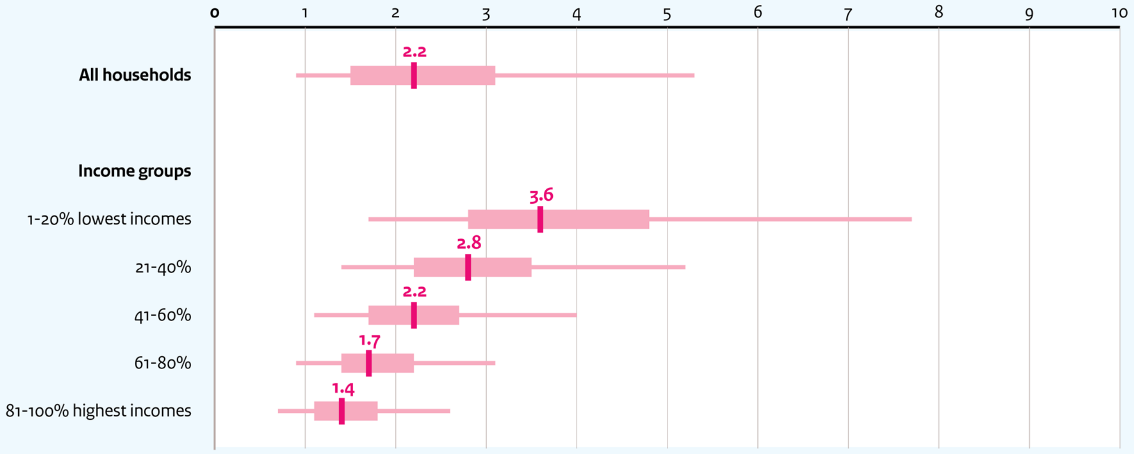
[9] Koot, P., R. Schulenberg and J.C. Bollen (2018), Verkenning inkomenseffecten van energie- en klimaatbeleid [Outlook income effects of energy and climate policy (in Dutch)], CPB Background Document (link); CBS, Prijs van energie 86 procent hoger [Price of energy 86% higher], online article 18 February 2022 (link).
[10] Van den Beukel, J. (2022), Minder langetermijncontracten, meer volatiele gasmarkten [Fewer long-term contracts, more volatile natural gas markets], Energeia 22 January (link).
[11] IEA World Energy Outlook 2021 and Zeniekski commentary online article 22 October 2021 (link).
[12] Based on measurements in April 2021, source: ACM Energiemonitor 2021 (link).

level, expressed as a percentage of net disposable income. The lower the income, the greater the increase. In the lowest income quintile, the median increase is 3.6%, whereas for the highest incomes this will be 1.4%. The spread within the income groups is also substantial, particularly in the lowest income quintile. A quarter of the households in this quintile will experience an increase of between 3.6% and 4.8%. For another quarter, the increase will be more than 4.8%. The size of the increase depends on the level of energy consumption, which is influenced by household composition, energy consumption behaviour, and the energy quality of the particular property.

Increase in the cost of living as a result of rising energy prices

average change in the cost of living as a share of disposable income, in % (a)



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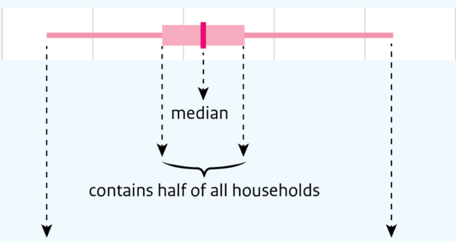


The lowest and highest values have been cut at the 5th and 95th percentile, respectively, as the projections of the minimum and maximum are imprecise.

A median is the middle value of a distribution of figures, ordered from low to high. A median purchasing power development of 1.3% for all households means that half of them will experience a purchasing power development of 1.3% or lower, while for the other half this will be 1.3% or higher. For half of all households, the purchasing power development will be within the margin indicated by the pink bar, with a quarter of them above and a quarter below the median. The other half of households will experience an effect outside this range.

(a) Based on individual-level projections of disposable income over 2021, taking into account taxes, allowances, and indexation of wages and pensions. Volumes of energy consumption for 2021 based on household data from 2018, indexed to 2021 based on a reduction in average energy consumption, from the Climate and Energy Outlook 2021. The analysis assumes variable natural gas and electricity tariffs that will stabilise at levels three times higher than those of January 2021.

Even under the alternative price scenarios, large differences between households will remain. In this analysis, we assumed that variable natural gas and electricity prices will stabilise at a level that, ultimately, will be approximately three times higher than before the sharp rise in energy prices (in January 2021). Other price developments are also conceivable, see the alternative scenarios in this CEP. The final energy costs for the median household will follow the developments, proportionally, whereby the spread between households will remain.

The possibility for households to absorb this increase in the cost of living, in the short term, is limited. The higher energy prices lead to a decline in household prosperity. Natural gas consumption cannot be rapidly replaced, in the short term. The installation of a heat pump or energy-saving measures often require a substantial investment and will only lead to net financial savings in the medium term. Such investments in rental properties by housing corporations, for example, will not be able to be made all at the same time and are therefore only a medium-term solution. Reducing energy consumption in the short term is an option to a certain extent, but could also mean that some people are literally left out in the cold.

Without additional policies, poverty and financial vulnerability amongst low-income earners will increase. Most Dutch households have a financial buffer that is large enough to absorb the energy cost shock without getting into financial trouble or falling into poverty. However, this does not apply to households that are already living at or below the poverty line. In addition, there is a group of households whose income is above the poverty line but who have a limited buffer and could therefore run into financial problems if they were to experience a major cost shock.[13] A general reduction in energy tax is relatively easy to implement, but if the goal is to prevent poverty, this is not a very efficient way of achieving that goal. Targeted compensation policies implemented by municipalities do reduce the likelihood of the receiving households falling into poverty, but have so far been limited in scope (about 200 euros) and targeted only at households with an income at or just above the social minimum.

The government cannot compensate for the increased cost of living without increasing the financial burden in other areas. The gradual phase-out of the country's natural gas production, has turned the Netherlands into a net importer of energy. A permanently higher energy price on the world market, therefore, has resulted in a deterioration of the country's international terms of trade, as it has to pay more for its imports and its real GDP is decreasing. In several European countries, energy prices are controlled and/or energy company profits are regulated.[14] The expenditure on compensation of households for collective loss of wealth is then recovered by increasing the financial burden for energy companies. This policy, or increase in the financial burden for companies, may be at the expense of investments and lead to higher consumer prices in the future. Another way of compensating for collective loss of wealth is by increasing the national debt, which would mean shifting the financial burden on to future generations and goes against current budget rules. Policies that would reduce the energy demand for all households will, in the longer term, help to reduce the vulnerability of households to strongly fluctuating energy prices.

[13] CPB/AFM (2020), Stresstest huishoudens: De schokbestendigheid van zelfstandigen en werknemers [Stress test households; The shock resilience of workers and the self-employed] (link)
[14] Sgaravatti, G., S. Tagliapietra, G. Zachmann (2021), 'National policies to shield consumers from rising energy prices', Bruegel Data sets, first published 4 November (link).

3 Outlook to 2030

This chapter provides a renewed and extended medium-term outlook on the budgetary and economic developments up to 2030. In January 2022, CPB outlined the budgetary and economic consequences of the Coalition Agreement up to and including 2025.[15] The current Coalition Agreement will continue to have an impact after 2025, certainly because a large part of the policy will be introduced at the end of the government's term in office, and because of additional spending in the period thereafter. In addition, the ageing population will cause potential economic growth to slow down, while the government expenditure on health care and state pensions will increase. As a result of these developments, the government deficit and debt will increase towards 2030.

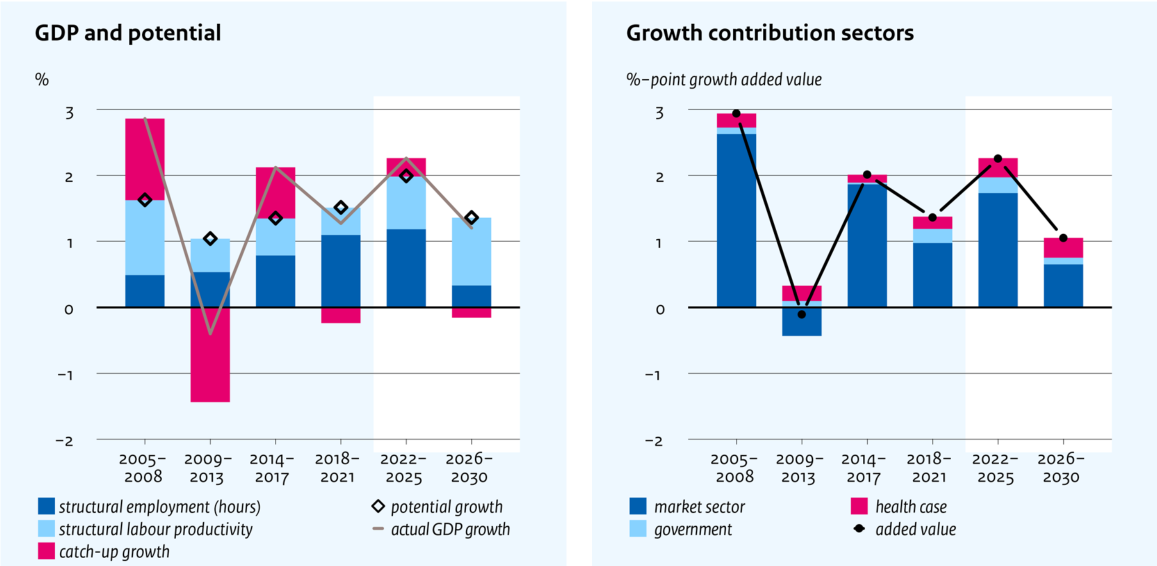
Population ageing is slowing down the increase in labour supply and thus also in the potential growth over the 2026–2030 period. The growth in the population aged between 15 and 75 will continue to level off, in the coming years. In most age categories, the employment rate continues to increase, but less rapidly than in recent years. In addition, the working age population is getting older, which reduces the average participation rate. There is no doubt that the population is ageing, while uncertainty about future net immigration creates uncertainty about the development of the labour supply. Unemployment, in the longer term, is moving towards an equilibrium value of over 5% of the labour force (according to the new definition, which is described in more detail in the elaboration document to the CEP 2022[16]).

Structural productivity growth is in line with the long-term average; the permanent economic damage from the coronavirus crisis seems less than expected. Previous expectations of structural growth in labour productivity were lower due to the coronavirus crisis, both because of weaker growth in capital goods stocks and a smaller increase in multi-factor productivity.[17] Given the economy's high degree of resilience and rapid recovery in 2021, these effects now appear to be limited. Therefore, we no longer assume that the coronavirus crisis will result in any lasting damage. However, there is still a large amount of uncertainty surrounding structural productivity development; for example, with respect to the size and impact of learning deficits and long-term coronavirus complaints on the labour market, as well as regarding the impact of developments that have accelerated, such as digitisation.

Technically, we assumed that the output gap closes in 2029.[18] According to the projections, the output gap will remain positive in the coming years, partly due to the spending increases resulting from the current Coalition Agreement. In order to close the output gap, the average projected growth over the 2026–2030 period is below potential growth and unemployment gradually increase to its equilibrium value. These assumptions were made because, certainly for the medium-to-long term, economic booms and downturns cannot be predicted. This means that the extended medium-term outlook to 2030 has a largely technical character.

[15] See CPB (2022), Analysis of the economic and budgetary impact of the Coalition Agreement, link.
[16] From 16 March onwards, see: CPB (2022), Verdiepingsdocument CEP 2022 [elaboration document CEP 2022], link
[17] See CPB (2020), Actualisatie Verkenning middellange termijn 2022-2025 [Update medium-term outlook 2022–2025 (in Dutch)] (November 2020), link.
[18] 2029 is the end of the next government's term in office, and is conform the system of rolling projections, see Van Tilburg, I. (2018), De rollende raming, CPB Background Document, link.

Figure 3.1 Potential and projected actual growth (left) and contribution from market, public and healthcare sectors (right)



In the coming years, government expenditures on health care and state pensions will increase further, due to population ageing. The projections for health care are based on realistic assumptions under unchanged policy.[19] In other words, the projections do not provide an indication of how much could be spent, but shows what the expected health care expenditure would be if the current policy is maintained without any new adjustments being made, see Table 3.1. This means that expenditures will increase not only because more people would be in need of health care, but also as a result of income increases and other types of growth.[20]

Table 3.1 Development government expenditures on health care and on care related to the Social Support Act (Wmo)/Youth care 1991–2030

	1991–2018 (a)	2018–2021	2022–2025	2026–2030
				growth, in % per year
Nominal growth government expenditure on health care	4.9	5.5	6.1	5.4
General inflation (price mutation GDP)	1.8	2.6	2.9	2.1
Real growth	3.0	2.9	3.3	3.4
... of which demographic/epidemiological factors	1.0	1.4	1.2	1.5
... of which real wages and prices	0.5	-0.2	0.7	1.1
... of which policy effects		0.9	0.1	-0.2
... of which income growth	1.2	0.6	0.9	0.7
... of which other growth	0.3	0.1	0.4	0.4

a) The growth in 1991–2018 concerns constructed gross series, based on the CBS health care accounts (Zorgrekeningen), conform the statutory regulations in 2018.

[19] See Zeilstra, A., A. den Ouden and W. Vermeulen (2019), Middellangetermijnverkenning zorg 2022-2025 (medium-term outlook health care 2022–2025), link

[20] Expenditures related to Wmo and Youth care increase more rapidly than the budget of the municipal and provincial fund from which these costs need to funded. The projections assume that this difference, from 2026 onwards, will be at the expense of the EMU balance of local governments.

Government revenues will increase slightly, as percentage of GDP, over the 2026–2030 period. The increase in wage and income tax is greater than income growth, because a larger part of the higher income falls under the higher tax rate due to the progressive tax brackets. The health insurance premiums cover costs and will increase in line with the greater expenditures related to the Health Insurance Act (Zwv). The growth in indirect taxes will be less than in the economy, particularly because the greening of the national car fleet leads to lower revenues from fuel excise duties and vehicle registration tax (BPM).

The Coalition Agreement provides for a substantial boost to spending, over the current government's term in office. Higher government spending will boost economic growth, causing the economy through 2025 to outpace potential growth. The government deficit will increase, although this will be limited by the fact that additional spending will also lead to higher tax revenues. The increase in the debt ratio is also dampened by the higher GDP (denominator effect). The debt ratio will be lower by 2025 than in last January's analysis of the Coalition Agreement, mainly due to a better starting position in 2021 and a smaller deficit in 2022 and 2023.

Over the 2022–2025 period, purchasing power will generally increase by an average of 0.3% per year. The policies in the Coalition Agreement will have a positive impact on purchasing power. The development of purchasing power is more favourable than in the January analysis, mainly due to the effect of higher inflation on wages, among other things. For pensioners, the purchasing power, on average, will remain at the same level during this government's term in office. This is the result of the impact of inflation and a higher indexation of supplementary pensions.

The Coalition Agreement will increase government expenditure also beyond 2025. Most additional expenditure, such as on social security and education, will continue after the current government's term in office. The annual amount set aside for the climate and nitrogen fund will increase further after 2025. The Coalition Agreement also includes temporary spending, over the period from 2026 to 2030, such as on the National Growth Fund and the strengthening of stream valleys in the Province of Limburg. Measures that are not incidental by nature are assumed to be structural. This applies to a number of measures that have been designated as temporary in the Coalition Agreement, such as additional expenditures on regional deals and the public housing fund.

After the spending boost in the coming government's term in office, the economy will adjust to a new equilibrium in the following years. The additional spending and jobs in the public sector eventually displace economic activity in the market sector. The higher wages and prices in 2025, as a result of the spending boost, will have a delayed impact on the rest of the economy in the years thereafter. The higher prices worsen the international competitive position, which will reduce the role of exports in relative terms. Consumption is also dampened by higher prices, while the relative share of health care increases. The slowdown in macroeconomic demand and the higher labour costs will reduce the demand for labour, causing unemployment to increase again to its equilibrium level.

Government expenditures outpace revenues, increasing the deficit and debt towards 2030. Most expenditures will continue after 2025, with those on health care and state pensions increasing further. At the same time, economic growth is slowing down, with lower increases in tax revenues, causing them to lag behind the level of expenditure. The lower economic growth also leads to a smaller denominator effect. After 2025, the government deficit will remain above 3% of GDP, while the debt will increase to more than 60% of GDP. These deteriorating public finances will also be offset by benefits, the effects of increased spending on, for example, education, climate and the environment will be for future generations.

Figure 3.2 Development in EMU balance (left) and EMU debt (right)

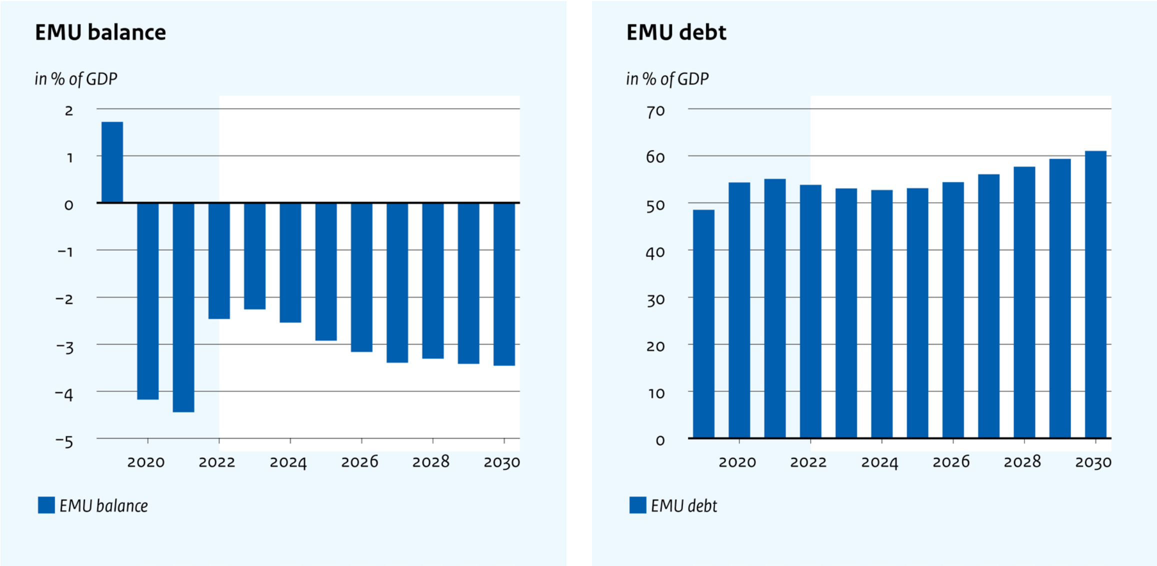


Table 3.2 Main data for the Netherlands, 2005–2030

	2005–2008	2009–2013	2014–2017	2018–2021	2022–2025	2026–2030
	mutations per year, in %					
International economy						
Relevant world trade volume goods and services	6.1	1.6	4.7	1.4	4.5	2.5
Competitor prices (a)	-0.1	1.3	1.9	2.0	2.1	1.2
Oil price (in USD per barrel, level in final year)	96.3	107.8	54.3	70.7	76.5	74.8
Euro exchange rate (USD per euro, level in final year)	1.47	1.33	1.13	1.18	1.17	1.27
Long-term interest rate, the Netherlands (level in % in final year)	4.2	2.0	0.5	-0.3	0.2	0.4
Volume GDP and spending						
Gross Domestic Product (GDP, economic growth)	2.9	-0.4	2.1	1.3	2.3	1.2
Household consumption	0.9	-0.8	1.4	-0.1	2.4	1.3
Government consumption	3.9	0.8	0.7	3.1	2.3	1.8
Investments (including stocks)	5.5	-3.7	5.5	0.9	3.9	1.2
Export of goods and services	5.0	2.2	5.0	2.0	3.8	2.4
Import of goods and services	5.0	1.7	5.3	1.8	4.5	2.7
Prices, wages and purchasing power						
Price level Gross Domestic Product	2.2	0.8	0.7	2.6	2.9	2.1
Export prices goods and services, excluding energy	1.4	0.7	0.2	1.7	2.3	1.2
Import prices goods and services	2.9	1.3	-1.4	2.1	2.5	0.9
Inflation, consumer price index (CPI)	1.7	2.0	0.8	2.1	3.1	2.0
Inflation, harmonised index consumer prices (HICP)	1.7	2.0	0.5	2.1	3.1	1.8
Wage rate business sector (per hour) (c)	2.8	1.9	0.6	2.9	3.4	3.8
Contract wages business sector	2.0	1.6	1.3	2.4	3.3	3.3
Purchasing power, static, median all households	0.5	-0.7	1.3	0.9	0.3	0.9
Labour market						
Labour force	1.3	0.5	0.3	1.0	1.0	0.2
Working population	1.8	-0.2	0.9	1.4	0.9	0.0
Unemployed labour force (x thousand persons, level in final year)	427	754	546	408	445	540
Unemployed labour force (in %, level in final year)	4.8	8.2	5.9	4.2	4.4	5.3
Employment (in hours)	1.5	-0.6	1.6	1.1	1.4	-0.1
Other						
labour income share (in %, level in final year)	70.5	74.1	73.3	72.2	70.7	72.7
Labour productivity business sector (per hour)	1.5	0.4	0.5	0.5	1.0	1.2
Individual saving share (in % disposable income, in final year) (b)	-1.4	2.4	3.5	8.7	4.0	2.3
Balance current accounts (level in final year, in % of GDP)	4.3	10.1	10.8	9.4	8.5	7.4
	level in final year, in % of GDP					
Public sector						
EMU balance	0.1	-3.0	1.3	-4.4	-2.9	-3.5
EMU debt	54.7	67.7	56.9	55.1	53.1	61.0
Public financial burden	35.9	36.1	38.7	39.5	38.6	39.5
Gross public spending	43.3	46.7	42.9	47.5	45.1	46.6

(a) Goods and services, excluding natural resources and fuels.
(b) Level; disposable family income includes public savings.
(c) The NOW wage cost subsidy and the continuity contribution in health care will have an upward effect on wage rate changes for businesses in 2020 of 3.3 percentage points and a downward impact of 2 percentage points in 2021, 0.9 percentage points in 2022 and 0.3 percentage points in 2023.

Table 3.3 Additional main data for the Netherlands, 2005–2030

	2005–2008	2009–2013	2014–2017	2018–2021	2022–2025	2026–2030
	mutations per year, in %					
Investments and exports						
Gross investments business sector (excl. housing)	6.7	-0.9	3.5	2.1	2.2	1.1
Business investments in housing	4.3	-12.0	14.9	3.3	3.6	0.9
Exports domestically produced goods and services (excl. energy)	3.0	2.3	5.0	0.1	3.2	2.2
Re-exports (excl. energy)	9.0	1.0	6.6	5.9	4.8	2.6
Prices; government; national CPI and contract wages market sector						
Derived national consumer price index (CPI)	1.7	1.5	0.7	1.7	3.2	2.0
Wage rate public sector (a)	3.5	2.3	1.9	2.6	4.1	3.8
Price government consumption: employee remunerations (a)	1.9	1.0	1.3	2.4	4.0	3.5
Price material government consumption (IMOC)	2.4	1.0	0.3	2.0	2.8	2.0
Price intermediate consumption government	2.6	1.8	1.4	2.2	1.5	1.9
Price gross government investments (IBOI)	2.5	1.5	0.3	2.6	2.8	1.9
Price national spending	2.2	1.1	0.6	2.7	3.0	2.0
Price added value businesses	2.1	0.6	0.5	2.4	2.7	2.2
Contract wages market sector	1.9	1.5	1.3	2.3	3.3	3.3
	level in final year					
Various main data						
Gross domestic product (GDP in billion euros)	647.2	660.5	738.1	859.1	1052.0	1236.2
Population (in thousand persons)	16405	16780	17082	17475	17980	18480
Labour force (in thousand persons)	8950	9187	9290	9656	10035	10140
Gross average income (euros per year)	31500	32500	34000	37000	43000	51500
EMU balance, structural (EC method; % of GDP)	-1.0	-1.1	0.6	-3.8	-3.2	-3.2

(a The closure of parts of the government, combined with continued payment of salaries, and the NOW wage subsidy have an upward effect on the mutations in 2020 of 0.2 percentage points. In 2021, there was a downward effect of 0.1 percentage point.