

Ministry of Finance

Dutch State Treasury Agency

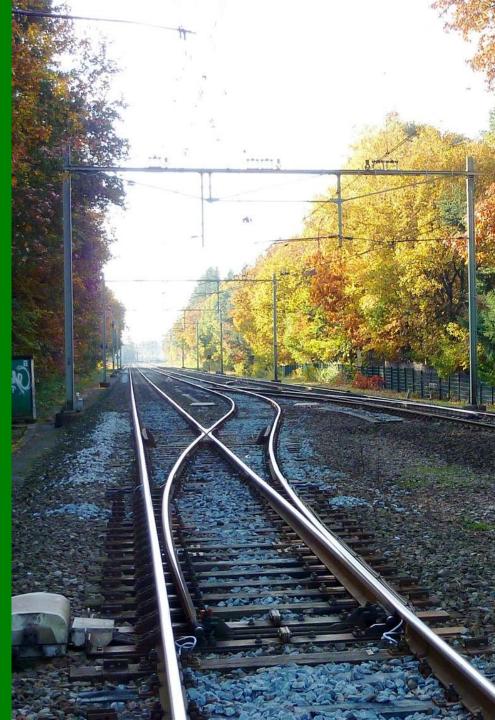
Investor presentation

Green DSL

Latest update: 2 May 2019

Green Bond

- First AAA-rated Sovereign to issue a Green bond
- First CBI-certified European Sovereign Green bond
- The Netherlands is positioned to issue Green bonds due to strong climate engagement
- The Netherlands aims to support the establishment of a green capital market
- Proceeds will be allocated to
 - renewable energy
 - energy efficiencies
 - clean transportation
 - climate change adaptation and sustainable water management
- To encourage Green investor demand the DSTA will consider giving increased allocations to those who identify themselves as Green via the Investor Letter
- Expenditures will include min. 50% from current and future budgets
- Compliant to Green Bond principles (Sustainalytics as SPO provider)
- Pre- and post-issuance verification





Reasons to buy the DSL

- <u>Strong economy</u>: 1.5% GDP growth projected for 2019, growing housing market and declining unemployment
- Solid budget: Budget surplus, and EMUdebt level below 60% GDP. Solid reputation of consensus-based <u>fiscal</u> <u>discipline</u>
- Liquidity: commitment to raise outstanding amount of bond to a size of around € 10 bn within several years after first issuance.
- <u>Tradability</u>: Continuous availability of secondary market prices
- <u>Highly rated</u> issuer (Aaa/AAA/AAA): only triple A rated EMU sovereign with an <u>attractive yield</u> compared to Germany



Contents

1.	Economic Outlook	5
2.	Funding and Issuance	11
3.	Liquidity and investor base	15
4.	Green Bond	19
Sup	pplement I: Current government policy	42
Sup	pplement II: The economy continued	47
Supplement III: The DDA explained		63
Sup	Supplement IV: Funding instruments	

Economic Outlook



Projections: solid economic performance

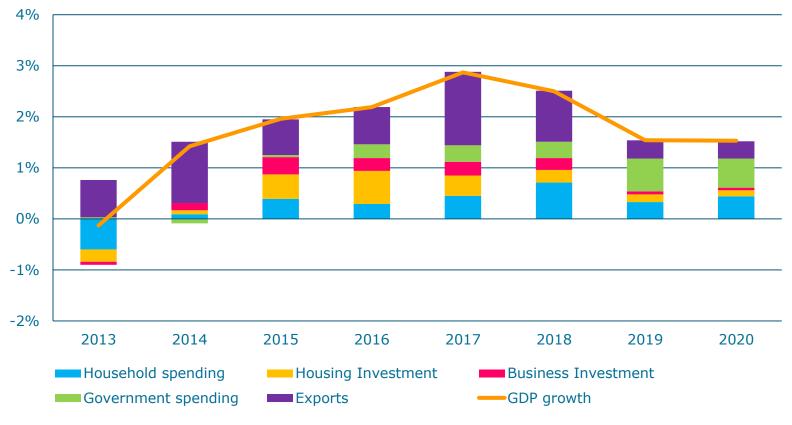
Key economic figures 2017-2020 (% change, y-o-y)

	2017	2018	2019	2020
GDP growth	2.9	2.5	1.5	1.5
Household consumption	1.9	2.5	1.3	1.5
Government consumption	1.1	1.1	2.4	2.3
Investments (incl. inventories)	4.4	4.2	2.6	2.5
Exports	5.3	2.7	1.1	2.3
Imports	4.9	2.7	1.5	3.0
Unemployment (% of labour force)	4.9	3.8	3.8	4.0
Inflation (HICP)	1.3	1.6	2.3	1.4

Source: CPB (Netherlands Bureau for Economic Policy Analysis), March 2019 (www.cpb.nl)



Broad-based economic growth



Source: CPB (Netherlands Bureau for Economic Policy Analysis), March 2019 (www.cpb.nl)



Strong fundamentals

- Strong public finances leave ample scope to deal with setbacks
- Low unemployment

Households have a strong net asset position

• Pension assets are the highest in the world. Discussions about reform of the pension system are ongoing.

Government policies address concerns around housing market

- Reduction of interest rate deductibility.
- Obligatory repayment of mortgage within 30 years.
- Reduced Loan-to-value ratio (100%).



Risks to the outlook

• Brexit

- The IMF and the CPB (Netherlands Bureau for Economic Policy Analysis) estimate an approximate 1.2% loss of GDP in the long run in case of a no-deal Brexit
- Given the relatively high base projections, this would still put the Netherlands among the fastest growing economies among core and semi-core European countries
- Contingency measures taken (border personnel)

American trade policy

- While a relatively small share of Dutch exports goes to the United States, flow on effects of decreased world trade could impact GDP growth
- The Netherlands is among most competitive economies in the world

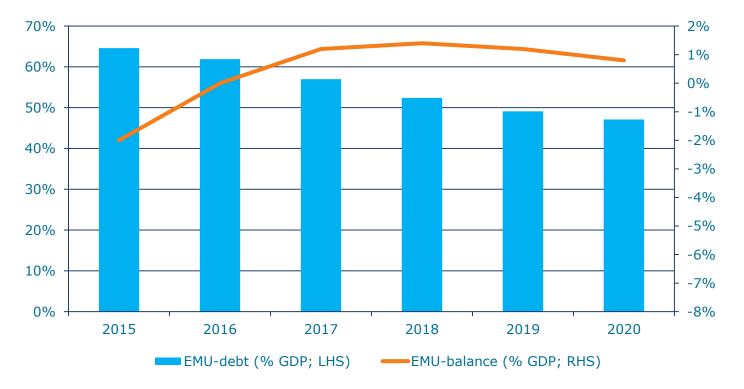
Further underutilisation of government budget

 Last year saw a 1.4% underutilisation of the government budget due to labour market constraints, and a one-off settlement with ING bank. An underspending of €1.5 billion (0.5% of budget) is estimated to reduce growth by 0.2% of GDP. Some underutilization of government budget is currently included in the forecasts for 2019 and 2020.



Public finances are strong

EMU-debt and EMU-balance over 2015-2020, including projections

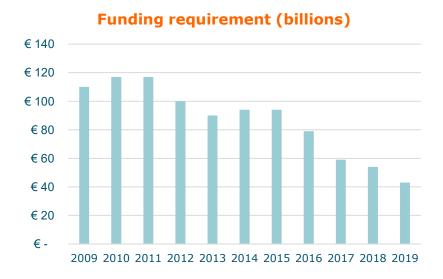


Source: CPB (Netherlands Bureau for Economic Policy Analysis), March 2019

Funding and Issuance



Strong public finances: more modest funding need



Borrowing requirement 2019	(€ bn)
Capital market redemptions 2019	29.6
Money market ultimo 2018 (excl. cash collateral)	20.2
Cash balance 2019*	-7.2
Total	42.6

* A cash surplus is shown as a negative number because it decreases the total borrowing requirement

Source: DSTA, January 2019



Issuance in 2019

Funding 2019	(€ bn)
Capital market issuance (DSLs) in nominal terms	19-23
Money market ultimo 2019	19-23
Total	42.6

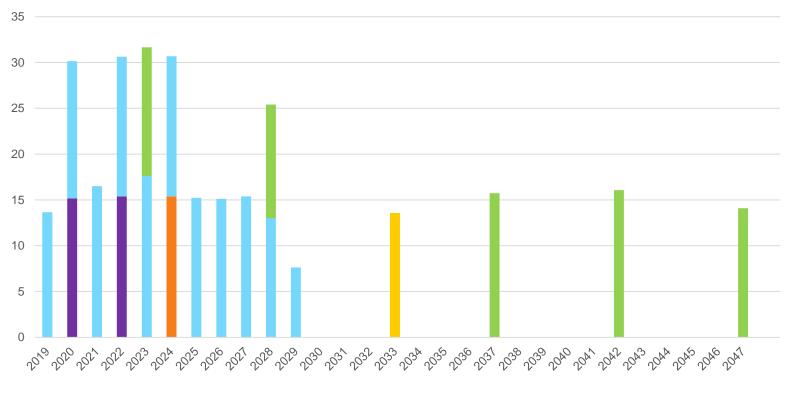
DSL	Indicative	Realised
New 10-year DSL 2029	≈ 12	7.6
Reopening off-the-run DSLs	≈ 3-5	1.8
Green bond	≈ 4 - 6	-
Total DSL funding	≈ 19 - 23	9.2

- Money market is primary buffer
- Some flexiblity on capital market (target range as announced in Outlook 2019)



DSL redemption profile

Redemptions of DSLs, position at the end of April 2019 (€ bn)



■5-year ■7-year ■10-year DSL ■20-year ■30-year

Liquidity and investor base

15

TTTT



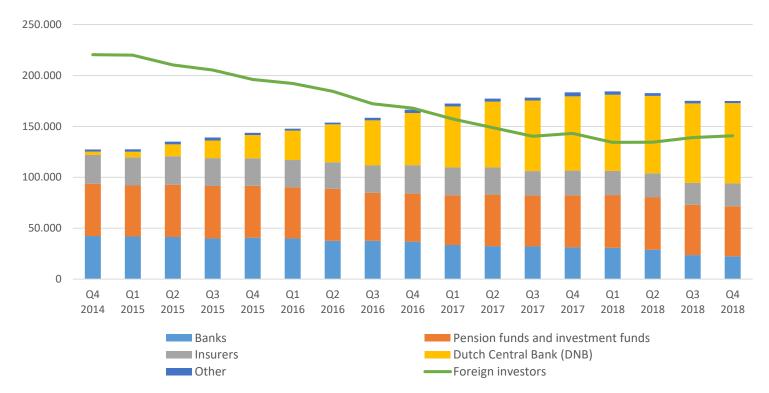
Ensuring sufficient liquidity in secondary markets

- Annual issuance of a new 10-year bond; and clarity at start of the year on other benchmark issuances (shorter-dated bonds, longer-dated bonds).
- Raising the outstanding amount of the 10-year bond to size of around € 12 bn within 1 year of issuance. Longer dated DSLs will be will reach minimum € 10 bn within several years. Same goes for the Green DSL.
- Quotation obligation for Primary Dealers to ensure tradable prices to be available at all times.
- Repo facility available to Primary Dealers ('lender of last resort').



Holdings of DSLs

Holdings of Dutch government securities (€ mln), Q4 2018

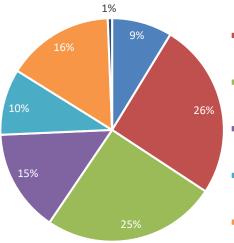


Source: Dutch Central Bank (DNB), April 2019



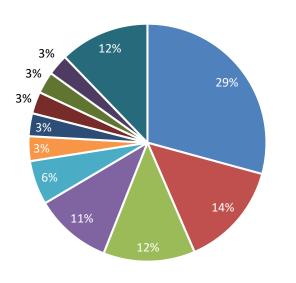
Diversified investor base: 10-year DSL 2029

Breakdown of investor base



Bank & Trusts

- Asset and fund managers
- Treasuries and ALM accounts of banks
- Hedge Fund
- Central banks, agencies and supranationals
- Pension funds and insurance companies
- Other Trading Desks



Geographical breakdown

United Kingdom

- Netherlands
- Italy
- United States
- Denmark
- Switzerland
- Germany
- France
- Spain
- Portugal
- Other

Green Bond



The Green DSL

The wider government policy

- Embedded in policy Dutch government: ambitious and greener over the last years:
 - Netherlands Energy Agreement in 2013
 - Climate ambition in Coalition Agreement in 2017
 - National climate and energy agreement in 2018
 - Expected legislation and policy in 2019
- Agenda financial sector: encouraging the sector
 - More attention in supervision
 - Active contribution of financial sector
 - Attention for ESG criteria

Motivations for issuance of Green Bond

- **Practise what you preach:** Minister of Finance concluded after extensive study that issuance of a green bond is feasible and desirable.
- Further support of the green finance market: introducing a solid asset class to this market as well as adding critical mass
- Set an example: provide other borrowers with a best practice green bond framework which can be used as guidance for future issuance



National climate change policy ~ 2013 - now

Netherlands Energy Agreement of 2013

Joint effort of the government and 40 interest groups to save energy (average of 1.5 per cent per year), promote renewable energy (14 per cent in 2020) and climate mitigation

Examples of measures:

- Scaling up of renewable energy (1000 extra wind mills)
- Energy savings in the built environment (insulation of social housing units)
- Phasing out of coal power plants (5 outdated power plants closed)
- Tax credits for clean energy



Increased NL climate ambition (CA 2017)

- EU target for 40% reduction by 2030 is a firm undertaking but insufficient to achieve the 2 degree target
 - Netherlands calls for a 55% reduction of greenhouse gas emissions by the EU in 2030
 - Should a more ambitious target for the EU as a whole prove infeasible, the Netherlands will strive to make more ambitious targets with like-minded countries in north-west Europe
- Preparing measures to prepare the Netherlands for a 49% reduction of greenhouse gas emissions by 2030
 - A new national climate and energy agreement, based on the 49% reduction, will be concluded
 - This agreement will give all stakeholder more certainty about the long-term targets
- The main points of the coalition agreement will be laid down in a Climate Act
 - Climate Act sets target for reduction of greenhouse gas at 49% (2030) and 95% (2050)
 - House of Commons has approved the bill, Senate is currently discussing the bill



National climate and energy agreement (2018)

Sectoral plans have been submitted in December 2018

• Joint effort of stakeholders to produce sectoral plans for the sectors industry, transport, built environment, electricity and land use/agriculture

• Sector plan from financial sector.

- Financial sector in the Netherlands is committed to reorient capital flows towards sustainable investment. The financial sector submitted proposals to:
 - participate in the financing of the energy transition;
 - report as from 2020 on the climate impact of the balance sheet;
 - reduce the climate impact of the balance sheets

• Assessment by the NL Environmental Assessment Agency (PBL)

- Estimated impact of the plans is 31- 52 Megaton GHG reduction in 2030
- A 49% reduction requires a 48.7 Megaton reduction. Further measures seem necessary
- National cost of the proposed measures are estimated at € 1.6-1.9 billion in 2030
- Government has announced a CO2 tax in response to the assessment
 - A CO2 tax for companies will be introduced. The burden of the energy tax will be redistributed from civilians to businesses



Overview of the Green Bond Framework

1. Use of proceeds



2. Process for expenditure evaluation & selection Interdepartmental working group to conduct annual evaluation

3. Management of Proceeds

Climate Bonds

Eligible Green Expenditures will be monitored via the National Financial Annual Report. DSTA intends to allocate at least 50% of the proceeds to expenditures in the budget year of issuance or future budget years

- 4. Allocation & Impact Reporting will occur until full allocation
- 5. External Reviews





Definition of Eligible Green Expenditures

Which SDG

Annual expenditure

€ 652 mn

Renewable Energy

Expenditures to support the development of renewable energy generation capacity. Currently this encompasses **solar energy and onshore and offshore wind energy**



Energy Efficiency

Expenditures for the improvement of energy efficiency in the **built environment, the public-, commercial- and industrial sector**.

Clean Transportation

Expenditures for the development, maintenance and management of **railway infrastructure** relating to upgrading trajectories for higher-frequency passenger rail travel, railway capacity management, bicycle parking space at rail stations, and linkages to other modes of public transportation



Climate Change Adaptation & Sustainable Water Management Expenditures under the Dutch Delta Programme to ensure **flood risk management, freshwater supply, and spatial planning** will be climate-proof and water-resilient reinforcing flood defences, monitoring and management of water levels, water distribution and related measures to anticipate on higher (fresh) water levels





Main Budget Articles





Use of Proceeds

- The Green Bond intend to exclusively finance or refinance, in whole or in part, expenditures which are part of the Central Government Budget and contribute to greenhouse gas emission reduction targets and climate change adaptation
- Eligible Green Expenditures can include government expenditures in the form of direct investment expenditures, subsidies, fiscal measures (tax credits) and selected operational expenditures
- The expenditures are limited to Central Government Budget expenditures in the budget year preceding the issuance, the budget year of issuance, and future budget years
- The Dutch State intends that Eligible Green Expenditures do not include expenditures towards government agencies and other public sector entities which themselves issue Green Bonds related to these expenditures
- Central Government Expenditures which already obtain dedicated funding are excluded from the Eligible Green Expenditures
- Expenditures directly related to **fossil fuel production**, **fossil fuel power generation**, **nuclear energy**, **the defence sector are excluded** from the Eligible Green Expenditures



Management of Proceeds

- On an **annual basis**, The DSTA will decide upon the allocation of the net proceeds of the issued Green Bond towards Eligible Green Expenditures based on the realized expenditure levels available in the National Financial Annual Report
- As the Eligible Green Expenditures include expenditures from the entire budget year preceding the issuance, the budget year of issuance and future budget years, the DSTA intends to allocate at least 50% of the net proceeds of the issued Green Bond to expenditures in the budget year of issuance or future budget years
- Pending the full allocation of the proceeds of the issued Green Bond to Eligible Green Expenditures, the DSTA will manage the unallocated proceeds in line with the treasury policy of DTSA
- The allocation of the proceeds of the issued Green Bond to Eligible Green Expenditures will be reviewed and approved by the Green Bond Working Group on an annual basis, until full allocation



Project Evaluation and Selection

- **Green Bond Working Group** is responsible for the evaluation and selection of Eligible Green Expenditures
- Evaluation and selection will be performed on an **annual basis**.
- The DSTA coordinates this process and prepares an initial list of potential Eligible Green Expenditures by identifying expenditures in the Central Government Budget
- The list of potential Eligible Green Expenditures is evaluated by the Green Bond Working Group according to their feasibility and alignment with the criteria and definition of the Green Bond Framework

Green Bond Working Group

The Ministry of Finance has established an interdepartmental Green Bond Working Group, comprising of representatives from the:

- Dutch State Treasury Agency (Chair)
- Ministry of Finance
- Ministry of Economic Affairs and Climate Policy
- Ministry of Infrastructure and Water Management

The Green Bond Working Group is responsible for:

- The implementation and maintenance of the Green Bond Framework
- Evaluation and selection of Eligible Green Expenditures
- Allocation and management of Green Bond Proceeds
- Green Bond investor reporting



Reporting: allocation reporting

The DSTA will provide reporting for all issuance under the Green bond Framework

Allocation reporting

Within 3 months following the publication of the National Financial Annual Report of the year of issuance of the inaugural Green Bond, the DSTA will publish an allocation report outlining:

- An overview of the allocation of the issued Green Bond to the main categories of Eligible Green Expenditures (Renewable Energy, Energy Efficiency, Clean Transportation and Climate Change Adaptation & Sustainable Water Management)
- A breakdown per main category of Eligible Green Expenditures on Central Government Budget Article level
- A breakdown per type of expenditures (direct investment expenditures, subsidies, fiscal measures (tax credits) and selected operational expenditures)
- The amount of unallocated proceeds
- The allocation report will be updated annually, until full allocation



Reporting: impact reporting

The DSTA will provide reporting for all issuance under the Green bond Framework

Impact reporting

Starting in the year following the issuance of the inaugural Green Bond, the DSTA will publish an impact report addressing the positive environmental impact of Eligible Green Expenditures

The impact report will be based on existing publicly available reporting of the results and impact of Eligible Green Expenditures and will provide information on:

- Specific results (e.g. total number of projects)
- Environmental impact indicators (e.g. avoided CO2 emission)
- Where feasible, the impact report will be updated annually and until full allocation of the proceeds of the issued Green Bond
- Where necessary, the DSTA may provide additional updates due to the time-lag in the publication of specific environmental impact indicators
- The approach to impact reporting may be updated over time to align with emerging reporting standards and methodologies adopted by the Dutch State



External Review ~ Pre- and Post-issuance

Green Bond Framework – Pre-Issuance Verification

- Second Party Opinion Sustainalytics: "Sustainalytics is of the opinion that the State of the Netherlands Green Bond Framework is credible and impactful and aligns with the four core components of the Green Bond Principles 2018."
- Formal Certification by the Climate Bonds Initiative. CBI criteria were met for:
 - Solar energy
 - Marine renewable energy
 - Water infrastructure
 - Low carbon buildings
 - · Low carbon land transportation criteria

Green Bond Framework – Post-Issuance Verification

- Starting 1 year after issuance of the Green Bond, the DSTA will request the Independent Internal Auditor of the Dutch State ("Auditdienst Rijk") to provide an independent verification for the allocation of the proceeds of the issued the Green Bond to Eligible Green Expenditures in line with the criteria of this Framework. The report will be provided annually until full allocation of the proceeds of the issued Green Bond.
- Verification of the conformity with the Climate Bonds Standard by Sustainalytics





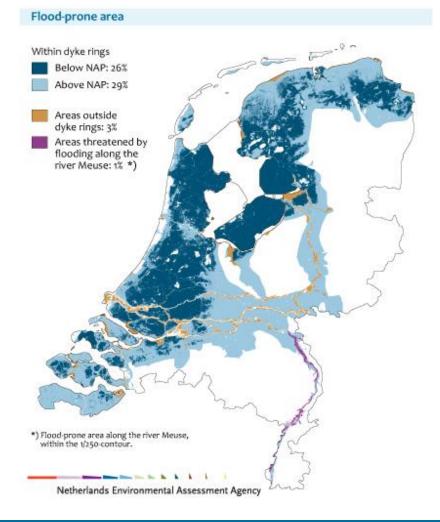
Anticipated Impact Indicators

Eligible Green Expenditures	Result indicators	Environmental impact indicators		
Renewable Energy				
 Stimulation of Sustainable Energy Production (SDE) 	 Number of projects Number of projects split per renewable energy technology Total subsidized renewable energy capacity (in MW) 	 Actual annual energy production (in MWh) Annual Greenhouse Gas emission avoidance (in CO₂ equivalent) 		
Energy Efficiency				
 Energy savings in the rental housing sector 	 Number of applications Number of houses upgraded for energy performance 	 Annual energy savings (in MWh) Annual Greenhouse Gas emission reduction (in CO₂ equivalent) 		
Clean Transportation				
 Maintenance and management of railway infrastructure Development of railway infrastructure for passenger rail 	 Realised projects (case studies) KM of infrastructure maintained 	Annual passenger train kilometres		
Climate Change Adaptation & Sustainable Water Management				
Deltafonds	 KM and percentage of dykes reinforced to a safe level Number and % of flood defence reinforced to safe level 	 Availability of flood defences (%) Reduction of flood risk / frequency 		



More than 50% of the country vulnerable for flooding

- Major flood defences constructed after 1953 flooding (Deltaprogramme)
- Additional risks caused by extreme weather conditions (precipitation and drought)
- Deltaprogramme 2019 expects that sea level in the Netherlands will rise by 1 to 2 metres in 2100 (provided that the temperature increase can be limited to 2 degrees)
- Delta Act provides legal basis to ensure that flood risk management will be climate-proof and water resilient by 2050





Case study 1 – Renewable energy

SDE subsidy for Off shore wind energy "Luchterduinen"

- 23 km from the shore (invisable on most days)
- 43 windmills
- 129 MW capacity
- Annual production:
 - ➢ 531 mn kwH
 - > 150,000 households
- Over period of 15 years operational subsidy (max. of € 989 mn)





Case study 2 – Energy efficiency

- Subsidy for improvement of energy efficiency of homes
- Example neighbourhood in Hengelo
 - Total of 172 homes renovated
 - Energy label E/F/G to A/B
 - Through STEP-subsidy
 €500,000 for making these houses more sustainable by:
 - > Wall- or floor insulation
 - High-efficiency glazing
 - More efficient central heating





Case study 3 – clean transportation

Bicycle parking spaces at railway stations

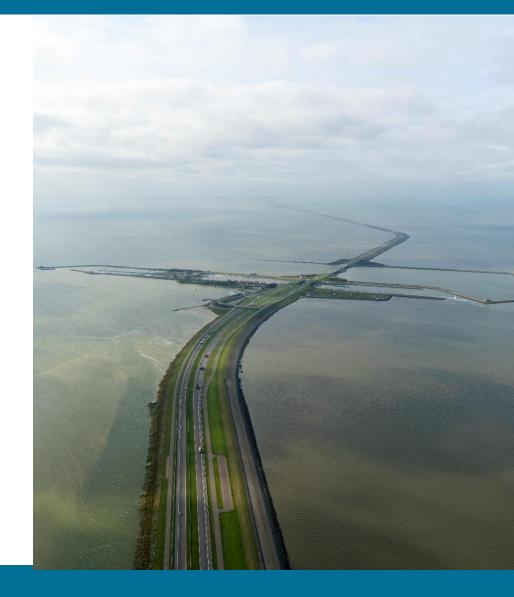
- Example: Bicycle parking Utrecht Central Station
 - ➤ 12500 parking spaces
 - Largest in world
- Rationale:
 - Quick access storage → train platform
 - Shortening door-to-door transportation times





Case study 4 – climate change adaption & sustainable water management

- Reinforcement of the Afsluitdijk
- Needed due to sea level rise and more frequent extreme weather conditions
- Reinforcing the dyke
- Installing pumps (solar powered) in order to help the sluices
- Fish migration river installed
- Renovation works done energyefficiently (using concrete blocks with -56% CO2 emmissions)





Details new Green Dutch State Loan

Details new DSL 2040	
DDA date	Tuesday 21 May 2019
Maturity date	15 January 2040 (short first coupon)
Reference bond	DBR 4.75% 4 July 2040
Target volume	€ 4 - 6 bn ; to be raised to approx. € 10 bn in due time
Pricing	Aim to price on the auction day, but no later than 12:00 CET on 22 May 2019
Settlement date	Two days after pricing
Coupon	To be announced on Friday 17 May 2019
Initial spread guidance	To be announced on Monday 20 May 2019
Country ratings	Aaa/AAA/AAA
Total fees	€ 13 mn (incl. advisory fee) for 2019, including 10 years DDA



Time schedule Green DDA

- Book opens 10:00 CET on Tuesday 21 May 2019
- Final spread guidance will be announced no later than 15:00 CET on the auction day
- Book closes at the latest 17:00 CET on the auction day
- Allocation communicated as soon as possible after closing the book; preferably on the day of auction but no later than 09:00 CET the following morning
- Pricing from 30 minutes after allocation and preferably on the auction day itself; but no later than 12:00 CET the following day



Green investor allocation rule

- DSTA aims to attract a high number of investors with a green focus to the deal
- To incentivize participation from Green Real Money clients, DSTA has decided to give a marginal preference to green investors in the allocation
- DSTA reserves the right to allocate up to ten percentage points more to green real money investors vis-à-vis normal real money investors at the cut-off spread
- Investors have to register themselves as green via a registration letter, found on the website; www.dsta.nl

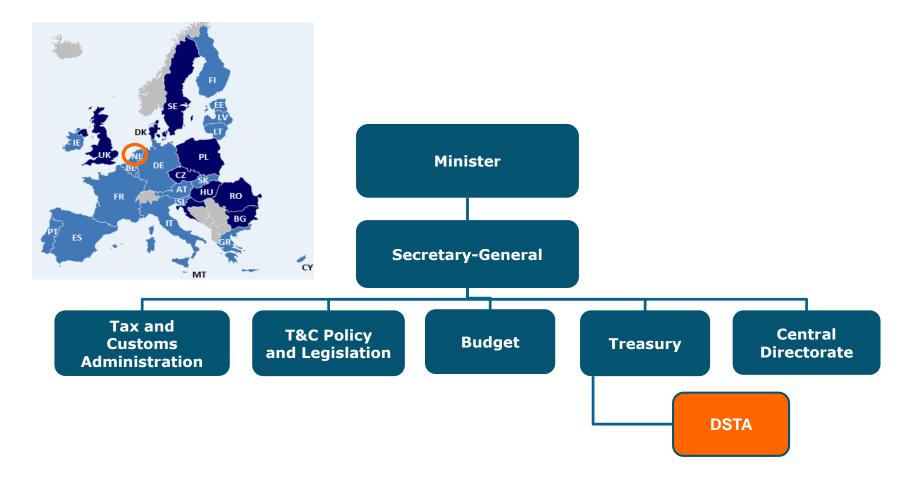


Supplement I

The DSTA & Current Government Policy



The Dutch Ministry of Finance





The Dutch State Treasury Agency



- Founded in 1841 in Amsterdam
- Moved to The Hague in 2009
- Part of the Ministry of Finance
- Autonomous decisions within a mandate:
 - Compatibility: only the Finance Minister can borrow on behalf of the State
 - Minister granted this mandate to the DSTA
- Main objective: to manage the State's debt efficiently and effectively and to meet the State's funding requirement by borrowing and lending money



Present political situation

- Government of Rutte (III) took office on 26 October 2017
- Long-standing tradition of `trend-based' budgetary policy → government expenditure levels are determined at the beginning of the government term, are fixed and cannot be exceeded during the government term.
- Specific investments are in the field of defense, education, security, environment, infrastructure and elderly care.
- The government plans contribute to the continued strong economic outlook for the Netherlands.



Governmental plans

Housing market

- There will be an accelerated reduction of the mortgage interest deduction: in steps of 3% per year to the basic rate
- Maximum LTV for new mortgages down to 100%

Pensions/retirement

- Retirement age increased to 67+ from 2021 onwards
- The coalition agreement envisages further modernization of the pension system

Health care

- The coalition agreement does not foresee major reforms. However, certain improvements will be made
- €2.1 bn is made structurally available for good quality residential care
- General agreements will be concluded again, with savings of €1.9 bn a year

Labour market

- Lower tax rates on labour (and higher VAT rate on consumption)
- Institutional changes to reduce labour market segmentation

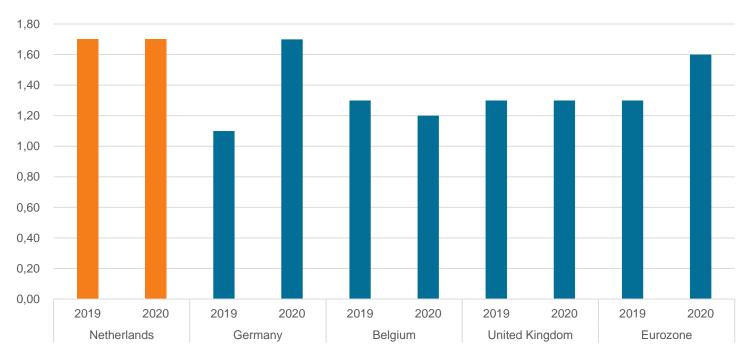


Supplement II

The economy continued



Dutch GDP growth stands out positively

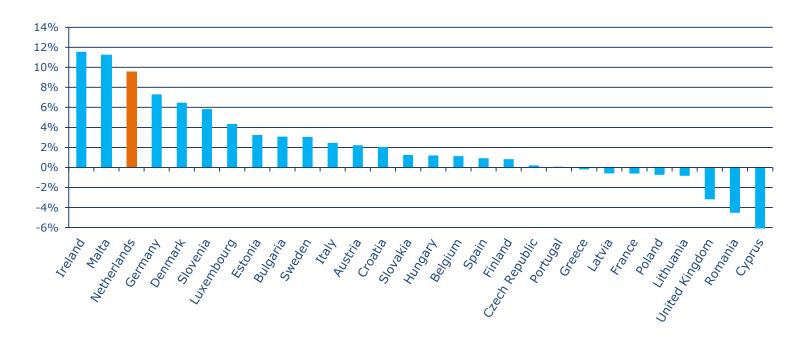


GDP growth (% y-o-y)

Source: European Commission (EC) Economic Winter 2019 forecast



Strong current account surplus



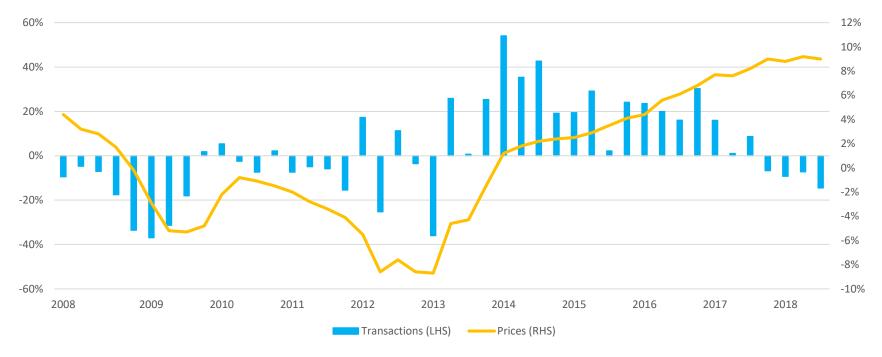
Current account balance 2019 (% of GDP)

Source: EC economic forecast autumn, November 2018



Housing market development

Transactions and prices %-change (y-o-y)

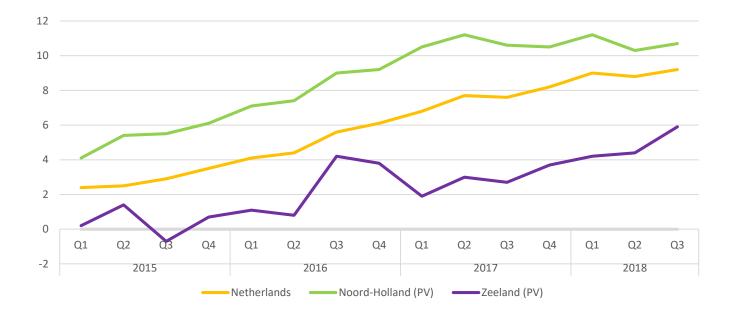


Source: CBS, January 2019



Regional divergence in housing prices

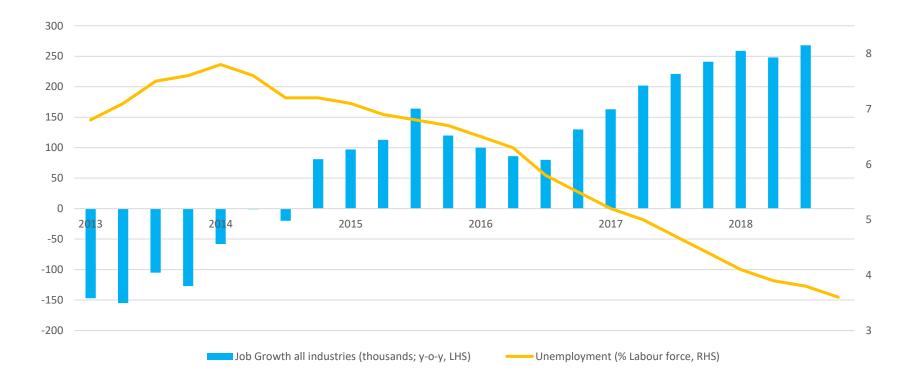
Housing prices in different provinces (%-change y-o-y)



Source: CBS, January 2019



Labour market recovery

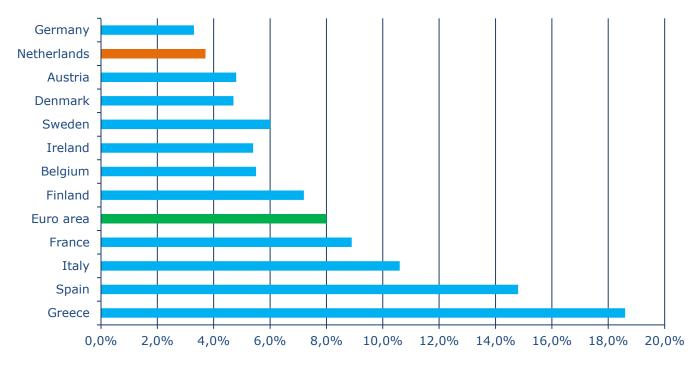


Source: CBS, January 2019



Unemployment is low

Unemployment rate, seasonally adjusted data (% of labour force)



Source: Eurostat, October 2018



Households have strong asset position

Other assets

Households assets and liabilities (% of GDP)



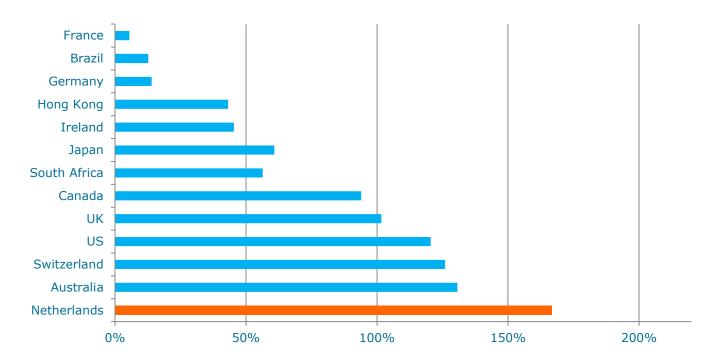
Mortgages

Source: Ministry of Finance, September 2018



Pension assets internationally

International pension assets in 2018 (% of GDP)

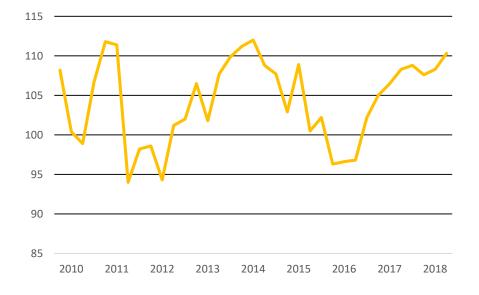


Source: Willis Towers Watson, Global Pension Asset Study, February 2019

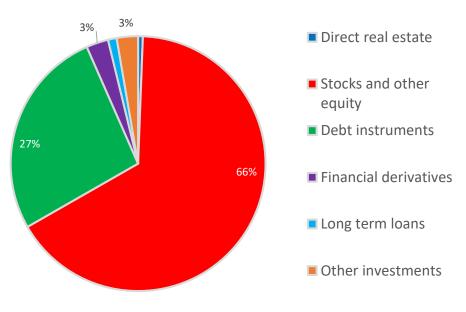


Pension funds

Pension fund coverage ratios



Pension fund holdings at the end of 2017

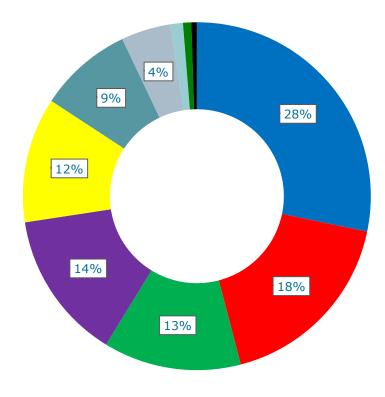


Source: DNB, December 2018

Source: CBS, July 2018

Export breakdown by product category

Export breakdown by product category, January - November 2018



- Machinery and transport equipment
- Chemicals and related product, n.e.s.
- Food and live animals
- Mineral fuels, lubricants relat. mat.
- Miscellaneous manufactured articles
- Manufactured goods classified chiefly by material
- Crude materials, inedible, except fuels
- Beverages and tobacco
- Animal and vegetable oils, fats and wax
- Commodities not classified elsewhere

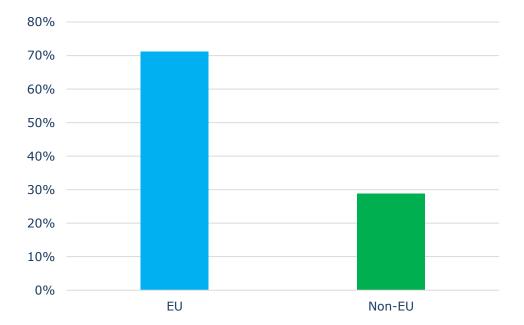
Source: CBS, January 2019



Export breakdown by country

Share of exports: EU and non EU (% of total), January – November 2018

Rank	Country	Share
1	Germany	22.9%
2	Belgium	10.3%
3	United Kingdom	8.4%
4	France	8.1%
5	USA	4.2%
6	Italy	4.1%
7	Spain	2.9%
8	Poland	2.5%
9	China	2.4%
10	Sweden	2.1%



Source: CBS, January 2019



Among the most competitive countries worldwide

Top 15 countries on the WEF Competitiveness Index

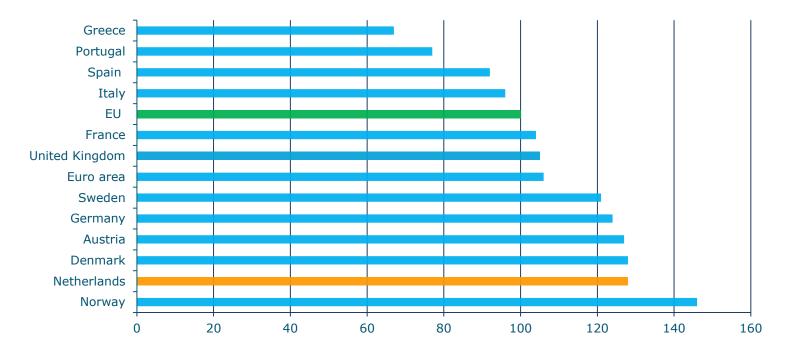
Rank	Country
1	United States
2	Singapore
3	Germany
4	Switzerland
5	Japan
6	Netherlands
7	Hong Kong SAR
8	United Kingdom
9	Sweden
10	Denmark
11	Finland
12	Canada
13	Taiwan, China
14	Australia
15	Korea, Rep.

Source: World Economic Forum, 2018 Rankings



GDP per capita among the highest in Europe

Real GDP per capita (PPS, 2017, index)

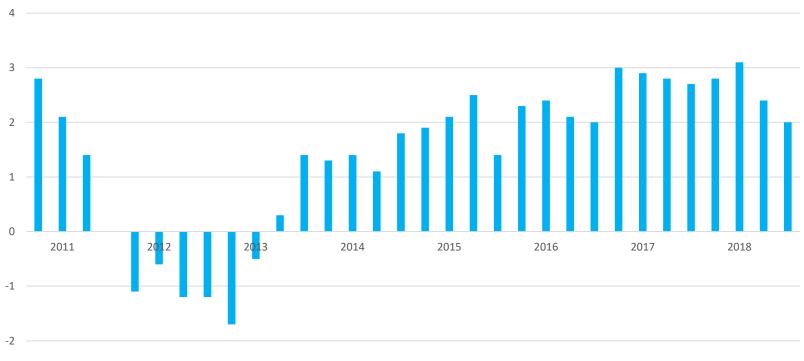


Source: Eurostat, June 2018



GDP on the rise

%-change, year-on-year



Source: CBS, February 2019



Financial sector interventions

- During the credit crisis in 2008 the State had to intervene in the financial sector to maintain financial stability of our economy. As a result, several financial institutions have been nationalized namely ABN Amro Bank and insurer ASR (2008) and later on bank-insurer SNS REAAL (2013).
- In the past few years, the Dutch State gradually reduced its stakes in these financial institutions. This resulted in privatization of the insurance and real estate part of SNS REAAL (respect. in July 2015 and September 2016), and a completed privatization of ASR (ended in September 2017).
- The remaining stakes are:
 - ABN Amro Bank: remaining 56% stake (current market value ≈ € 11 bn) will be sold in coming years
 - Volksbank (former banking part of SNS REAAL) no decision yet on privatization



Supplement III

The DDA explained



A short overview

- Rule-based auction \rightarrow all investors receive equal treatment
- Primary auction with direct participation of end-investors
- A single uniform price \rightarrow winner's curse avoided
- Bids can be placed via Primary Dealer(s) of choice and orders can be split via several dealers
- The DSTA is the sole book runner
 - Level playing field among all Primary Dealers
 - Confidential participation of investors
- PDs must sign a DDA Allocation and Price Compliance Statement as indicated in the General Conditions for PDs (https://english.dsta.nl/subjects/d/dealers)

The DDA rules can be found on our website: english.dsta.nl/ddarules



Bidding

- Bids are placed at increments of 0.5 bps to the reference bond or 'at best'
- Maximum bid of € 300 million per spread point
- An investor may split orders among Primary Dealers up to the maximum allowed (€ 300 million per spread)
- There is **no pot** in the DDA: Primary Dealers receive a total of € 13,000,000 including advisory fees for their performance over the 2 DDA's in 2019.
- Bids 'at best' are at all times equal to bids at the tightest spread



Investor classification

Real money clients	Other clients
Asset and Fund managers	Hedge funds
Central banks, agencies, and supranationals	All accounts of banks, except treasury / ALM accounts and private banks
Insurance companies	Other trading desks
Pension funds	
Private banks	
Treasuries / ALM accounts of banks	

Focus on Real money clients

- Allocation:
 - · Real money clients receive priority over Other clients at the cut-off spread
 - Green Real money clients will receive a marginal priority over Real money clients at the cut-off spread (up to 10 percentage points)

Safeguarding instant liquidity

• DSTA reserves the right to raise the allocation to 'Other clients' up to 35% of the total allocated amount

Green investors

• Only Real money clients can qualify as green investors, by way of signing a representation letter



Green investor allocation rule

- DSTA aims to attract a high number of investors with a green focus to the deal
- To incentivize participation from Green Real Money clients, DSTA has decided to give a marginal preference to green investors in the allocation
- DSTA reserves the right to allocate up to ten percentage points more to green real money investors vis-à-vis normal real money investors at the cut-off spread
- Investors have to register themselves as green via a registration letter, found on the website: www.dsta.nl



Mechanics of allocation – scenario 1

	Spread	At best	17	17.5	18
Order book	Green Real Money	500	1000	1000	1000
	Real Money	1000	1000	500	500
	Other	1000	1000	500	700
	Total	2500	3000	2000	2200
	Cumulative		5500	7500	9700

Allocated amount:

€ 4000 +17.0

• Uniform cut off:

00

Allocation at cut-off: Green Real Money Real Money Other

100% 90% 35%

	Spread	At best	17	17.5	18
Allocation	Green Real Money	500	1000	0	0
	Real Money	900	900	0	0
	Other	350	350	0	0
	Total	1750	2250	0	
	Cumulative		4000		



Mechanics of allocation – scenario 2

	Spread	At bes	t	17	17.5	18
Order book	Green Real Money		500	1000	1000	1000
OTGET DOOK	Real Money		1000	1000	500	500
	Other		1000	1000	500	700
	Total		2500	3000	2000	2200
	Cumulative			5500	7500	9700
				Alloca	ition at o	cut-off:
 Alloc 	ated amount:	€ 4500	$ \prec $	7	Green	Real Money
 Unifo 	orm cut off:	+17.0	\checkmark		Real M	oney

	Spread	At best	17	17.5	18
	Green Real Money	500	1000	0	0
	Real Money	1000	1000	0	0
Allocation	Other	500	500	0	0
	Total	2000	2500		
	Cumulative		4500		

Other

50%



Mechanics of allocation – scenario 3

	Spread	At best	17	17.5	18
Order book	Green Real Money	500	1000	400	1000
	Real Money	1000	1000	300	500
	Other	1000	1000	300	700
	Total	2500	3000	1000	2200
	Cumulative		5500	6500	8700

Allocated amount:

Uniform cut off:

+17.5



Allocation at cut-off:
Green Real Money
Real Money
Other

70% 60% 13.33%

	Spread	At best	17	17.5	18
Allocation	Green Real Money	500	1000	280	0
	Real Money	1000	1000	180	0
	Other	1000	1000	40	0
	Total	2500	3000	500	
	Cumulative		5500	6000	



Supplement IV

Funding instruments



Debt outstanding

Key figures at the end of March 2019

Instrument	(€ bn)
DSL (T-bonds)	289.7
DTC (T-bills)	15.9
Commercial Paper	0.5
Private loans	0.4
Cash	0.3
Cash collateral	9.6
Total debt outstanding	316.4

Source: DSTA, Monthly Report



Funding instruments: the capital market

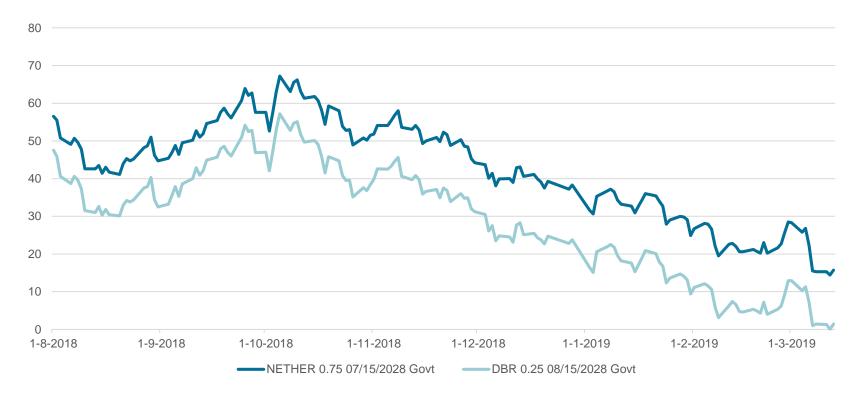
Dutch State Loans (T-bonds)

- Focus on issuance in EUR
- Maturities: annual issuance of 10-year DSL; additional focus on shorter end and longer end of the curve (up to 30 year segment)
- Auctions on fixed dates: 2nd and if needed on 4th Tuesday of the month
- Quarterly issuance calendars (Q1 2019, released 14 December 2018; Q2 2019 will be released on 22nd March 2019)
- Dutch Direct Auctions for new medium and longer-dated DSLs
- Benchmark sizes to ensure liquidity
- Buy-backs for cash management purposes (up to 24 months remaining maturity)



Dutch yield spreads attractive vs German bund

Yields of Nether Jul2028 versus DBR Aug2028 (in bps)

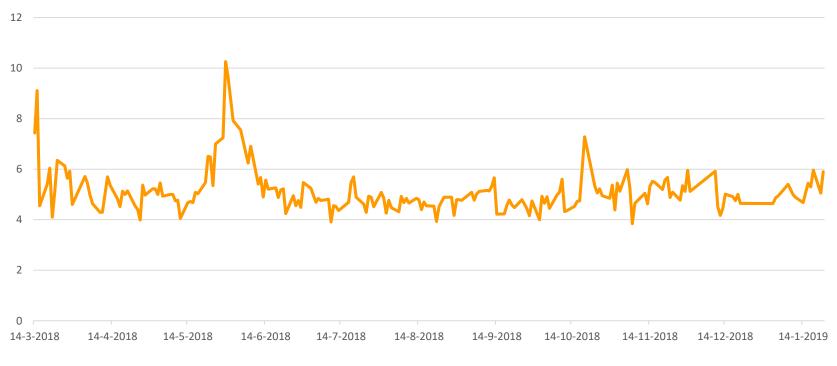


Source: Bloomberg



Tight interdealer bid/offer spreads

Tightest interdealer bid/offer spread of Nether Jul2028 (in cents)







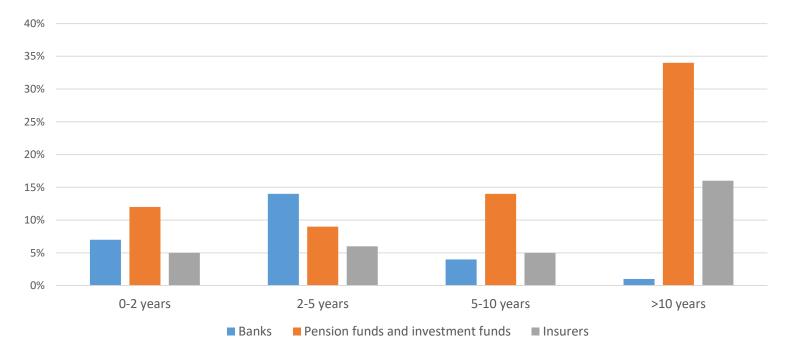
QE and DSLs

- ECB does not actively buy net securities under their current policy anymore but is still reinvesting maturing securities that have been bought under the APP
- As of the end of December 2018, the ECB bought approximately net € 115.2 bn of Dutch paper under the programme
- Next to DSLs, ECB can buy bonds from three other Dutch agencies:
 - Bank Nederlandse Gemeenten N.V. (BNG)
 - Nederlandse Waterschapsbank N.V. (NWB)
 - Nederlandse Financieringsmaatschappij voor Ontwikkelingslanden N.V. (FMO)
- Average maturity of Dutch debt held by ECB was 7.2 years at end of December 2018
- DNB has a securities lending facility



Holdings of DSLs per maturity segment

Domestic sector holdings (% of outstanding debt in the specific segments), Q4 2018



Source: DNB, April 2019



Funding instruments: the money market

Dutch Treasury Certificates (T-bills)

- Maturities: 3 to 6 months
- Auctions: twice a month on the first and third Monday

Commercial Paper (CP)

- USCP (SEC Rule 144A compliant) and ECP
- Maturities up to 1 year (focus on 3-28 days segment)
- In EUR, USD, GBP, CHF and NOK
- No auctions, dependent on cash needs
- Foreign currencies fully hedged

Deposits ("Cash")

- Borrowing short term; large amounts if necessary
- Lending: unsecured and secured (reverse repo: buy-sell-back)
- Also in USD (borrowing)



Funding strategy

- <u>Transparency</u>: calendars, press releases, website
- <u>Consistency</u>: no surprises, live up to commitments
- <u>Liquidity</u>:
 - Minimum outstanding volumes of bonds
 - Quotation obligations for PDs
 - Repo facility for PDs



Primary Dealer group for 2019

ABN AMRO Bank	Barclays	Citigroup
Goldman Sachs	HSBC France	ING Bank
Jefferies	Natixis	NatWest Markets
Nomura	Nordea	Rabobank
Société Générale		

Single Market Specialist: Commerzbank



Contact Details

- Website: english.dsta.nl
- E-mail: dsta@bloomberg.net
- Twitter: @dsta_nl
- Bloomberg: DSTA07 <GO>