IMK
Institut für Makroökonomie
und Konjunkturforschung

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der Hans-Böckler-Stiftung

# ON THE ECONOMICS OF A NEW GREEN DEAL: WHAT ARE THE NEEDS?

## The case of Germany

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# Programme

1. Why a Green New Deal?
2. Basic logic of a Green New Deal
3. Public investment requirements in Germany
4. Financing of a Green New Deal
5. Conclusions

# Why a Green New Deal?

- Decarbonisation is only one of the imminent challenges of the German economy
  - Demography
  - Growing (regional) inequality (both perceived and real)
- Decarbonisation will only be successful if support for it in society can be sustained over the long-term
  - Right-wing populists are already using the „the population against the elites“ narrativ in the climate change debate
    - Trump, Bolsonaro, Alternative für Deutschland

# The basic logic of a Green New Deal

– Decarbonisation is seen as a comprehensive strategy for inclusive and sustainable growth

– Broad investment needs will be tackled which at the same time help to bridge the gap between rich and poor, urban and rural areas

– For Germany, in addition to decarbonisation, this includes
  - Housing
  - (Green) Transport Infrastructure
  - Child care
  - Education
  - Communication networks

# „Nudging“ as an element of CO2-reduction

- Studies show that decarobonisation works best if CO2-reduced alternatives exist when carbon pricing is introduced
  - Attractive alternative mobility solutions
  - Infrastructure for CO2-neutral heating („district heating“)

- Important for Germany:
  - „Deutschlandtakt“ – shorter intervals in intercity connections
  - Improvement in local and regional public transports

# Our approach

- For **child-care, education, housing, transport & communication infrastructure**
  - Summary of different studies on investment needs in different sectors
  - Attempts to eliminate double counting
- For **decarbonisation**: Scenario „Technologiemix 95“ by Dena (2018)
  - Cost of transformation until 2050: €1700 bn
  - Distribution on years; annual investment of about 1.3 % of GDP
  - Assumed public share 35 %
- Caveat: Significant level of uncertainty
  - Example: Housing construction needs are highly disputed

# Summary: Investment needs

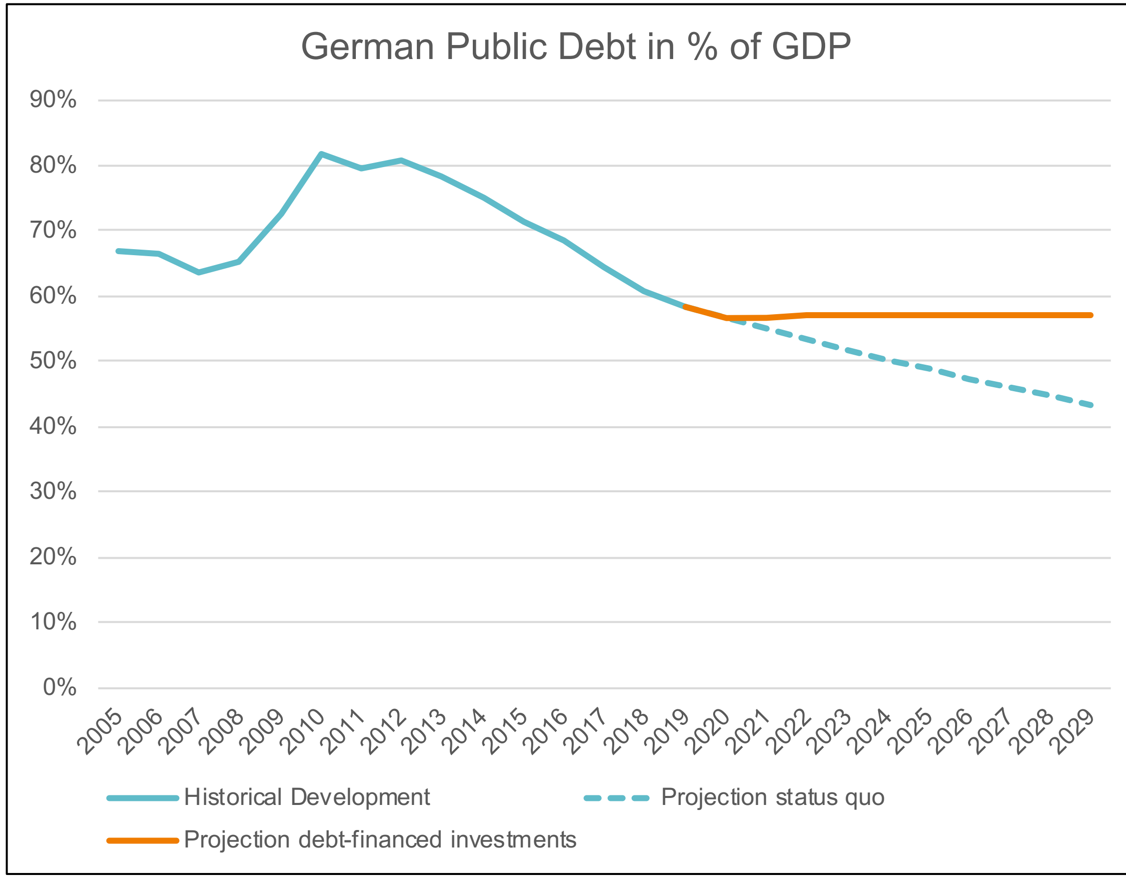
| | | Share | Sum 2020-29 | 2020 | 2025 |
|---|---|---|---|---|---|
| Municipalities | | | | | |
| | Closing accumulated infrastructure gap | | 138.0 | 13.8 | 13.8 |
| | Improvement of local public transport | | 25.0 | 2.5 | 2.5 |
| Education | | | | | |
| | Early child education | | 60.0 | 6.0 | 6.0 |
| | Construction of all-day-schools | | 9.0 | 3.0 | |
| | Operating costs of all-day schools | | 25.5 | | 3.4 |
| | Increase of spending on tertiary education by 0.2 % of GDP | | 73.1 | 6.9 | 7.7 |
| Housing construction | | | 252.0 | 25.2 | 25.2 |
| | - Public | 36% | 90.0 | 9.0 | 9.0 |
| | - Private | 64% | 162.0 | 16.2 | 16.2 |
| | Plus: public acquisition of land | | 15.0 | 1.5 | 1.5 |
| National infrastructure | | | | | |
| | Broadband/5G (public element) | | 30.0 | 3.0 | 3.0 |
| | Train system | | 60.0 | 6.0 | 6.0 |
| Decarbonisation of the German economy | | | 490.3 | 46.4 | 49.3 |
| | - Public | 35% | 171.6 | 16.3 | 17.3 |
| | - Private | 65% | 318.7 | 30.2 | 32.0 |
| | | | | | |
| **Sum additional public spending** | | | **697.2** | **68.0** | **71.0** |
| **in % of GDP** | | | **1.9** | **2.0** | **1.8** |

# How to finance a Green New Deal

– Debt financing would be appropriate
  - Large part of benefits accrue to later generations (e.g. lower energy import bill)
  - German debt level is low
  - Interest rates on German bunds are negative across all maturities

# Debt financing of investment needs

- Under conservative assumptions, investments could be debt-financed with stable debt-to-GDP ratio
- Problem: Constitutional debt brake & EU deficit rules




Assumptions: Real GDP growth 1.2 % p.a.; Inflation 1.8 % p.a.; interest rate on newly emitted government bonds: 0.5 % p.a.

# Conclusions

- A comprehensive Green New Deal for the case of Germany would cost around 2 % of GDP per year over the coming decade
- Despite these large costs, such a Green New Deal could be easily financed with additional debt

# THANK YOU VERY MUCH FOR YOUR ATTENTION