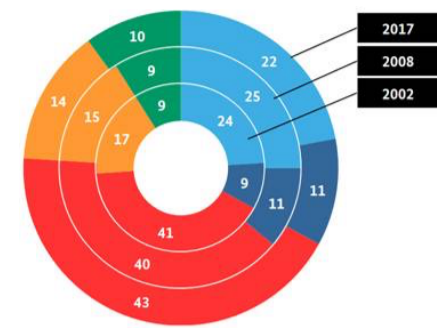


## Mobility

### TRANSPORT IN GERMANY

Mobility of human capital is a key component in regional economic growth, documented in various studies and summarized in Herbst and Rok's comprehensive 2013 review of theory and empirical literature. Moreover, statistics by the Land NRW and the Agentur für Arbeit show, that 39% of all Germans are crossing city borders to work. The diagram on the right also shows the total transport choices in Germany, illustrating that the shares stayed more or less constant between 2002-2017. (Source: BMVI)

TOTAL TRAFFIC VOLUME IN GERMANY IN %



## Mobility Turn

### ECOLOGICAL CHALLENGE

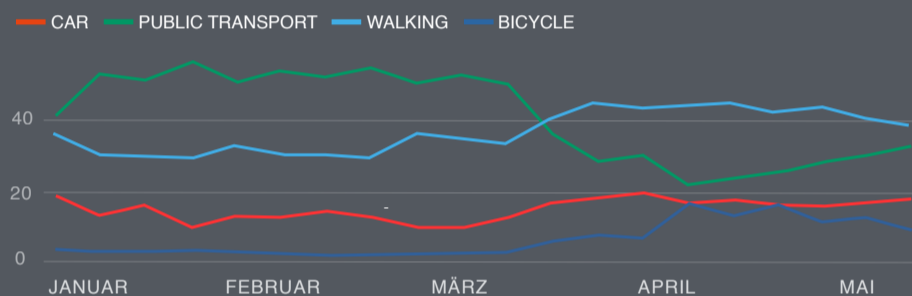
- Mobility of every man and women is one of the great achievements of modern days, but today's mobility also results in a heavy environmental burden.
- Motorized traffic is peaking. Fossil fuels accelerate global warming and people in urbanized areas are struggling with the implications of air pollution.
- Climate-friendly cars powered by green electricity, and new digital concepts such as car sharing via apps enable new ways of individual climate-friendly mobility.
- Public transport has a special leverage for the mobility turn in both regional and long distance traveling, with the potential to reduce individual traffic.

## Challenges

### PUBLIC TRANSPORT IN THE COVID-19 PANDEMIC

The Covid-19 pandemic and the subsequent regulations lead to a drastic change in transportation. The use of public transport dropped more than 80% in April and March, as 56% of the Europeans perceive public transport as the riskiest place during a pandemic. While the use of public transport is slowly increasing again; it is questionable if people will regain full trust in the long-run.

TIME SPEND USING TRANSPORT IN % Source: GfK/Motiontag



#### USERS

FREQUENT & OCCASIONAL USERS

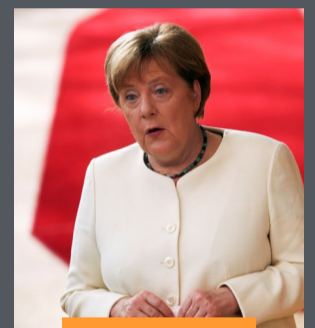
Perceiving public transport as heavy risk areas; many people avoid public transport and use alternatives if possible.



#### TRANSPORT COMPANIES

SHORT & LONG DISTANCE

Facing a heavy revenue loss, especially between March-May, many public transport companies are struggling



#### GOVERNMENT

EU & LOCAL AUTHORITIES

In June 2020 the Government already provides 2,5 billion to compensate losses in local public transport and another 6 billion of equity for the Bahn.

## Measures

### OVERVIEW

Providing an overview over the measures taken by the different actors, our aim is to add context to each measure. Providing a framework to our research question: „How a public transport based mobility turn can survive the Covid-19 pandemic“



#### Safety Measures

Hygienic rules and increased cleaning intervals to oppose the spread of the virus.

Since the outbreak of the Covid-19 pandemic a set of safety measures is implemented in all public areas and studies, as from Zhen, J. et al. 2020 provide evidence that they can slow down the spread of the Virus. However, it is too early to find valid benchmarks which particular safety measures are most effective.



#### Media Campaigns

Large scaled media campaigns including billboards and online blogs to regain trust.

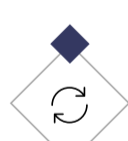
Strategically planned media campaigns have an impact on customer perception and various studies as by Laufer and Coombs indicate suitable measures to regain trust after a product harm crisis. The taken measures convey a level of control and trust, the efficiency however is questionable.



#### Rescue Package

Government equity investments to cover for revenue losses.

While government spendings support the sector in the short-run, critics question the longterm effect and the ability for the public transport sector to develop. Pointing out the absence of modern services and digital innovation, mobility expert Andreas Knie argues that public transport has not been able to increase market shares over many years and in small communes the numbers are even declining,



#### Mobility Tax

Financing public transport through taxation instead of single tickets sales to increase the use of public transport.

A longterm concept of free public transport, financed by an according taxation, is revisited in this financial crisis. Already tested in various Germany cities, like Hannover, free public transport for the weekend resulted in a 60% increase of people using public transport. However, in Tallinn, capital of Estonia, public transport is free since 5 years and not many people switched from car to public transport. Moreover Logistic Professor Benny Martin at the University of Luxemburg argues that cost ist just one first step; three more factors play an important role to encourage more use of public transport: frequency, comfort and quality.

## KEY FINDINGS

In the short-run safety measures as increased cleaning intervals have to be maintained. However, it is inevitable, that a public transport based mobility turn can survive the Covid-19 only with the help of government rescue packages. Moreover a mobility tax could be a way of financing the sector in the long-run. We believe that a structural change within the public transport sector is necessary. An increase in innovation, service frequency and quality is crucial to win back and increase customer shares, assuring that government spendings are effective in the long-run. The different public transport entities as well as government department starting from the EU down to the local authority districts have to work closer together.

An example of a recent positive development is a new law issued by the Bundesverkehrsministerium in favor of the so called Hubs and Spoke principles. Communes can now include pooling services in their transport planing, combining traditional transport via bus and train with innovative transport concepts such as car and scooter sharing.



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