

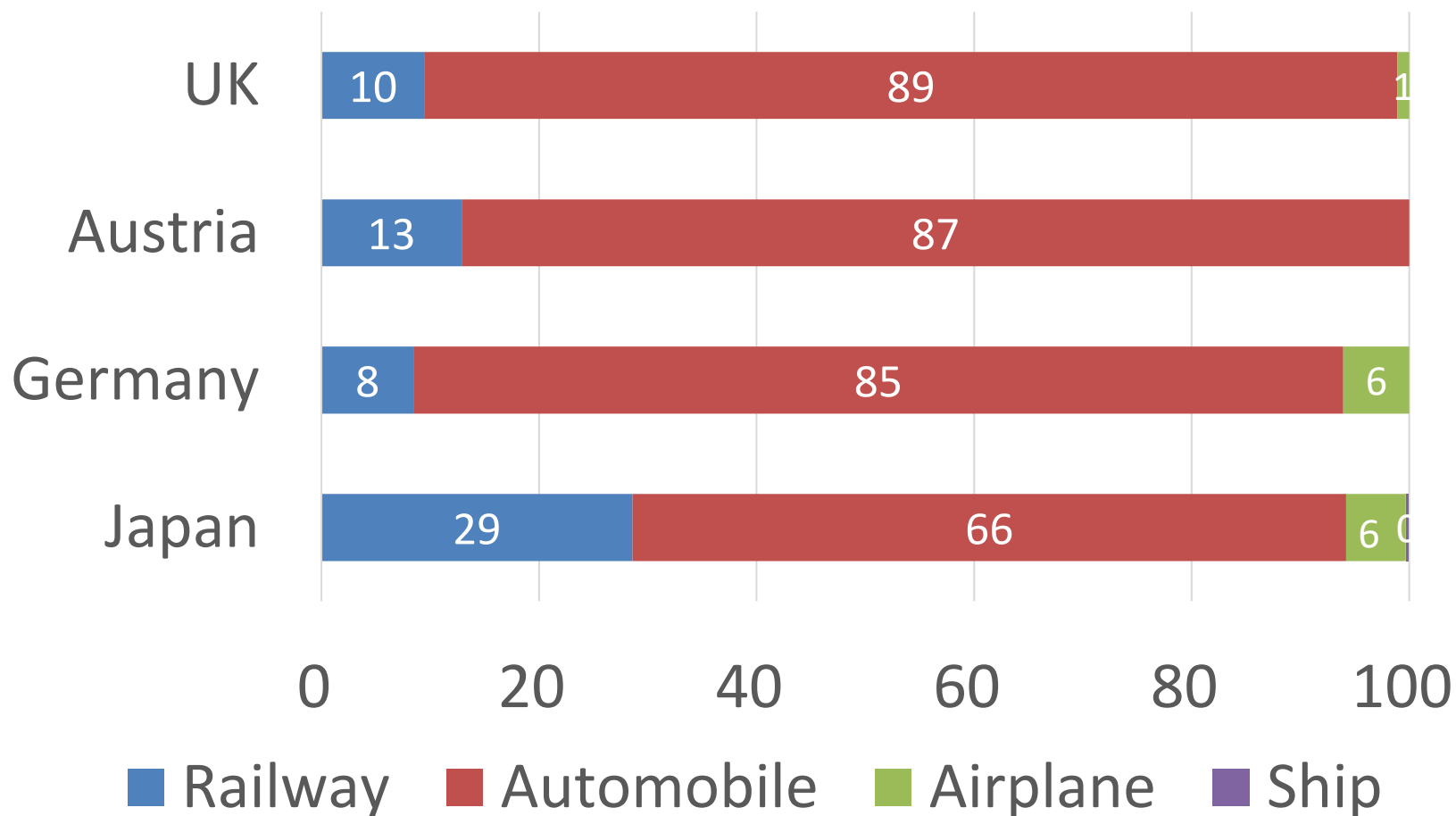
# Comparison of Railways in Japan and Europe

January 2024

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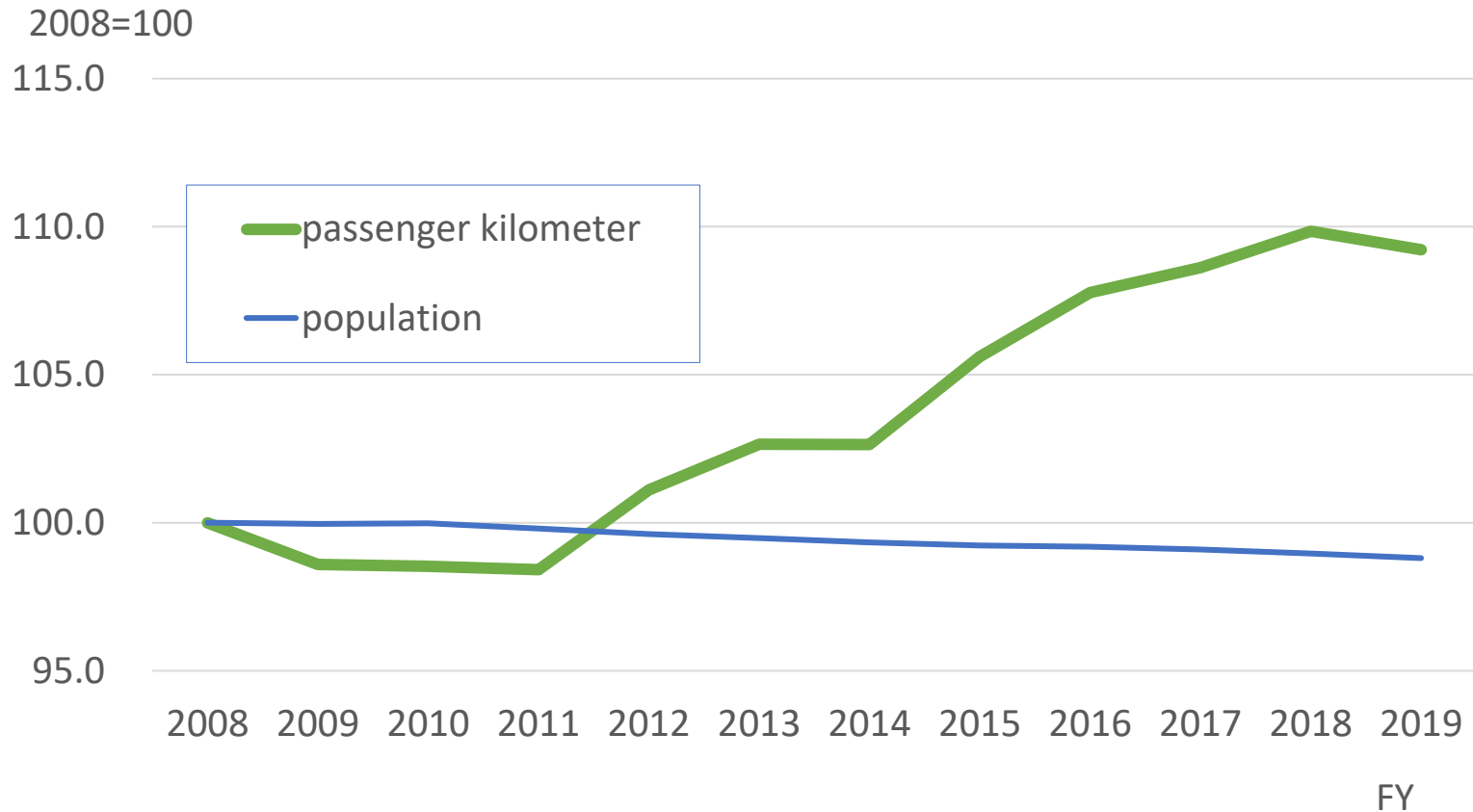
# Modal split (nation-wide)



Note: Data are 2018 except for Japan, which is 2009.  
Source: JTTRI, Suujidemiru Tetsudo



# Railway passengers in Japan



Source: JTTRI, *Suujidemiru Tetsudo*  
Statistics Bureau of Japan



# Features of Japanese railways

Railway networks in Japan are composed of not only JR groups, former JNR, but also other private companies, which were established in specific areas. Especially, “major 16 private companies” have dense networks in metropolitan areas.



Hankyu Railway (Osaka-Kyoto/Kobe)

# TOD Business Model

- 1872 Opening of Japan's first railway (Shinbashi-Yokohama)
- 1906-07 Nationalization of 17 private railways
- 1907 **Foundation of Minoo-Arima Electric Company (present-day Hankyu Corp.)**



Ichizo Kobayashi opened the first line in the outskirts of Osaka city.



Retail business



Transport business



Leisure business, etc.

Increasing passengers

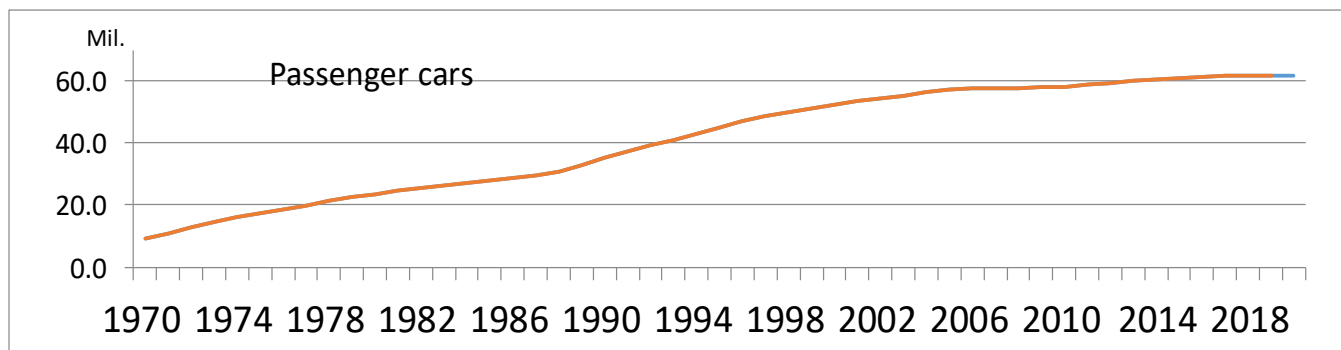
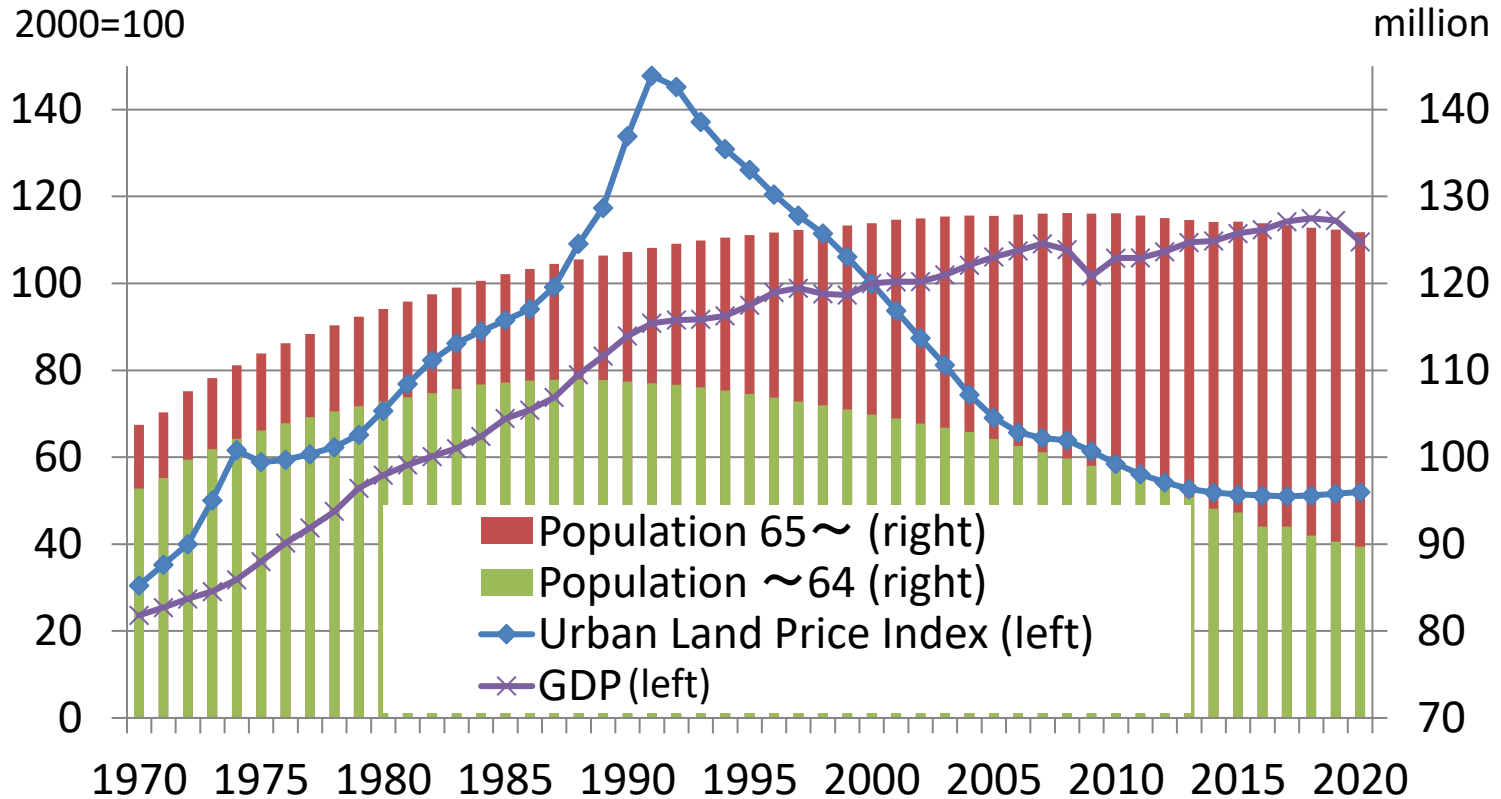


Real estate business

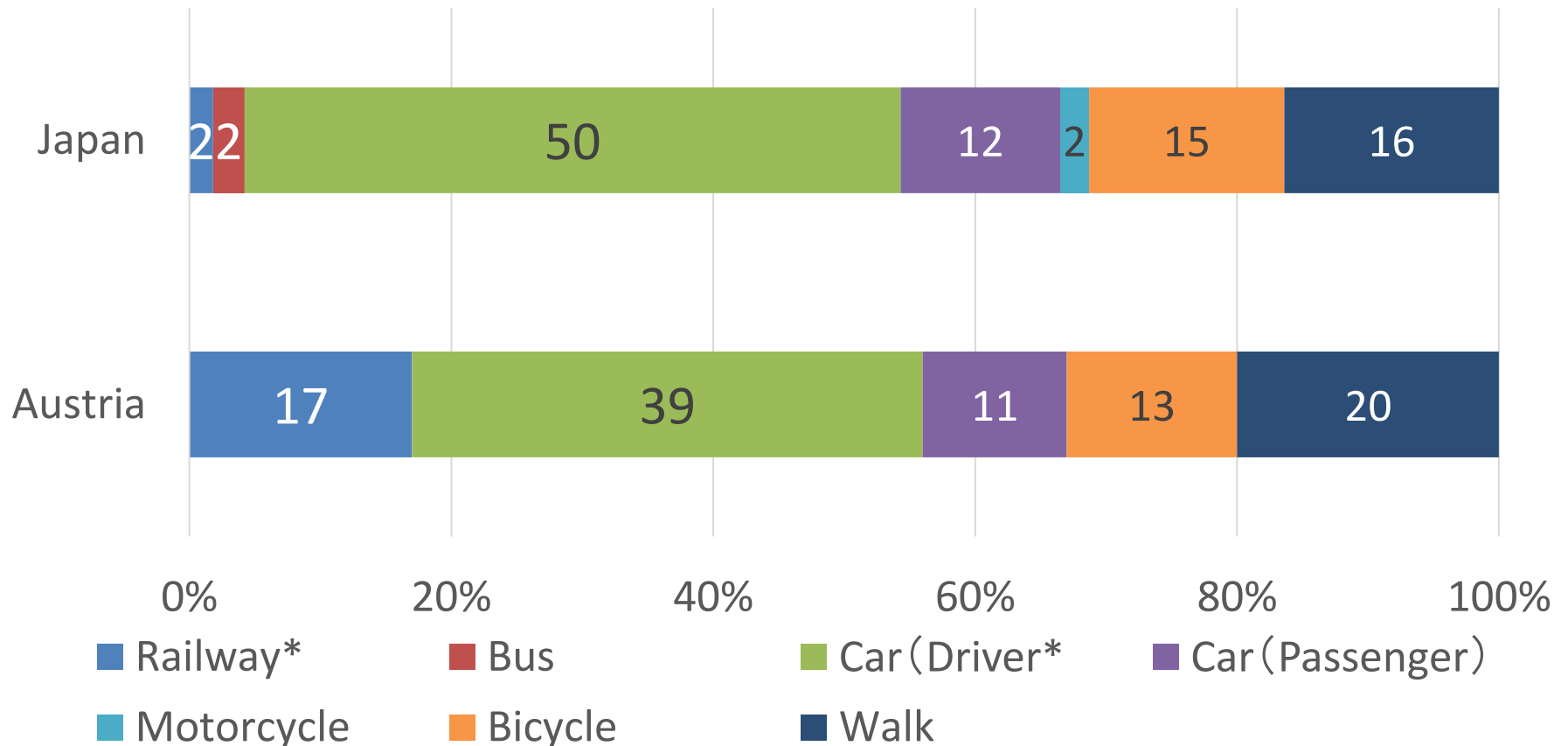


**Internalisation of external economic effects**

# Chronology in Japan (1970~)



# Modal split (regional city, weekday)



Note: "Railway" in Austria stands for public transportation including "Bus."

Regional city in Japan is the average of "Chiho chushin toshi (regional center city; population is less than 400 thou. ).

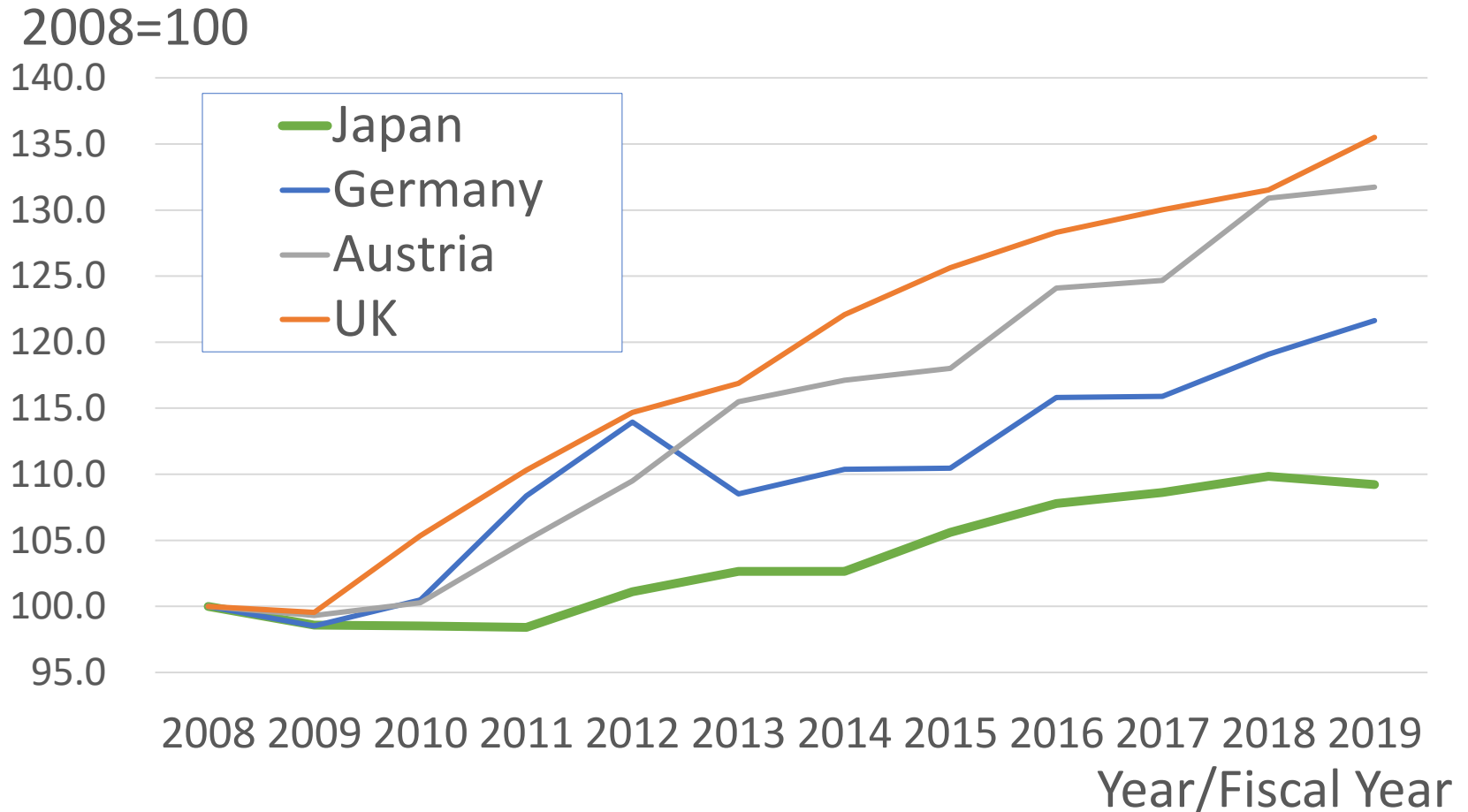
Regional city in Austria is the average of cities, whose population is more than 100 thou. excluding Vienna.

Source: MLIT, Nationwide person trip survey, 2015

BMK, Österreich unterwegs 2013/2014



# Railway passengers in Japan and European countries



Source: JTTRI, *Suujidemiru Tetsudo*

Eurostat [https://ec.europa.eu/eurostat/databrowser/explore/all/transp?lang=en&ubtheme=rail.rail\\_pa&display=list&sort=category](https://ec.europa.eu/eurostat/databrowser/explore/all/transp?lang=en&ubtheme=rail.rail_pa&display=list&sort=category)





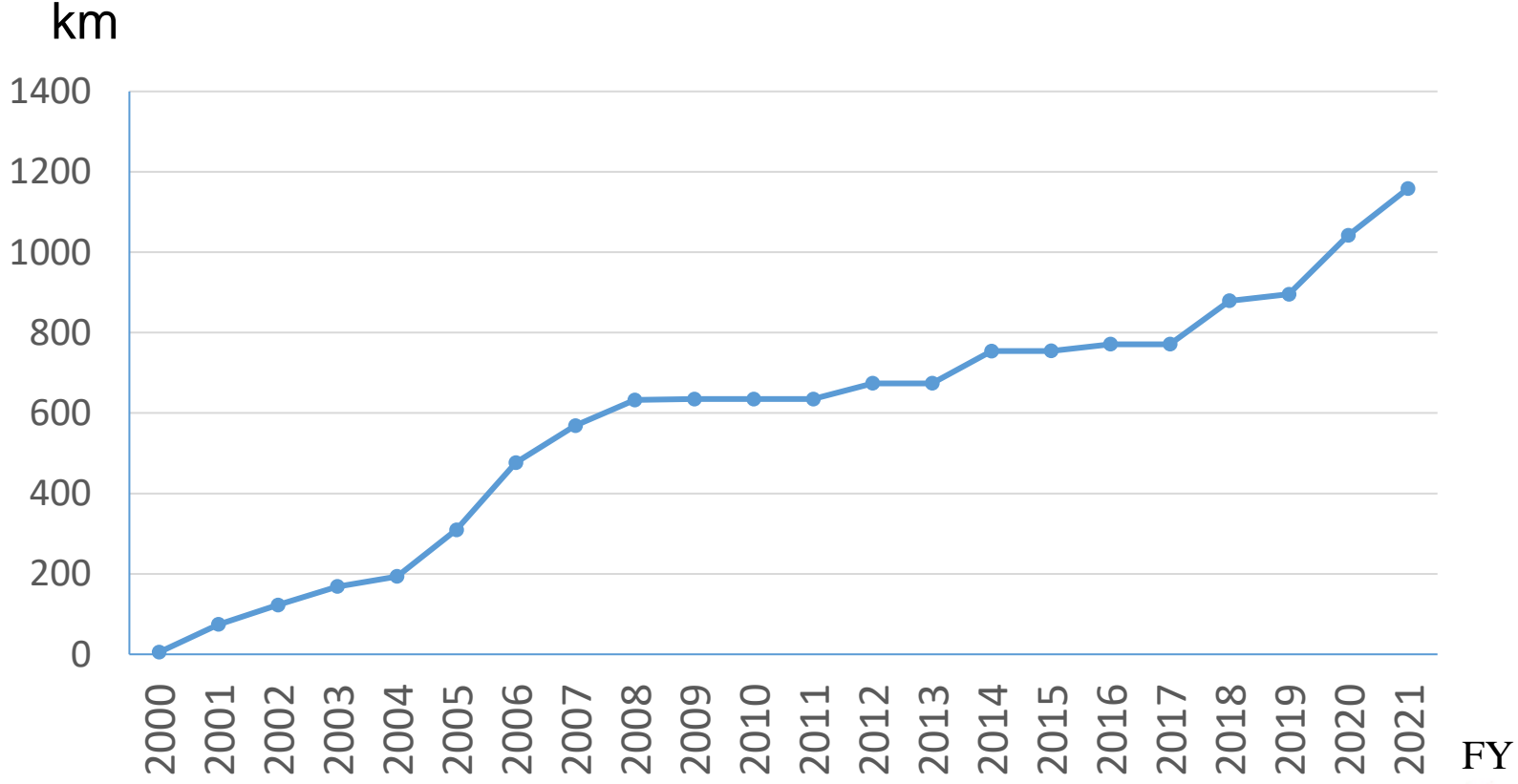
# Railways in regional cities in Japan in the past decades

- Most local railways in regional areas do not make profits due to motorization and decline of population.
- Although local governments in some regional areas subsidize local public transportation deficits, to a certain extent, they tend to force railway companies to reduce their costs rather than to support their operations.
- As a result, railway services not only in the countryside but also in regional cities have worsened and passengers have decreased further. Labour shortage arising from lower wages also damages railway services.

⇒ **Vicious circle**



# Closed railway lines in Japan after 2000



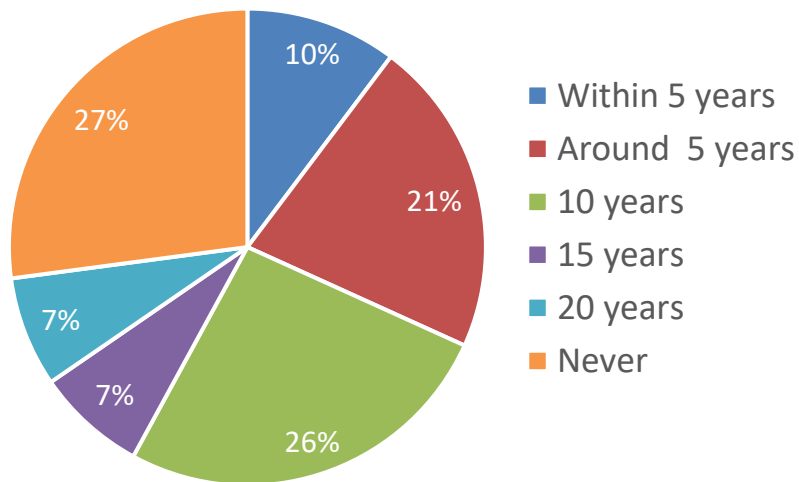
Source: MLIT



# Impact of COVID-19 on local public transportation business

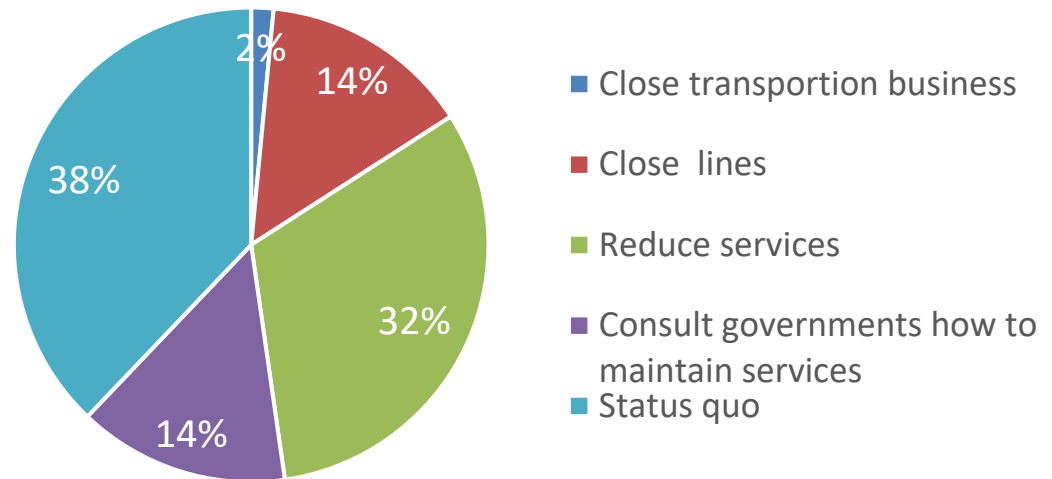
Results of the business survey on local public transportation companies in April 2022

## Timing of the recovery of the current loss



N-107

## Possible response to the current situation



Source: The Research Institute for Local Public Transport, Dai 4 Kai Koukyo Kotsu Keiei Jittai tyousa no Kekka Houkokusho, 2022



# PSO: Public Service Obligation

Regulation (EC) No 1370/2007

Article 2 (e)

'public service obligation' means a requirement defined or determined by a competent authority in order to ensure public passenger transport services in the general interest that an operator, if it were considering its own commercial interests, would not assume or would not assume to the same extent or under the same conditions without reward;

Preamble (4)

At the present time, many inland passenger transport services which are required in the general economic interest cannot be operated on a commercial basis. The competent authorities of the Member States must be able to act to ensure that such services are provided.

Source: Regulation (EC) No 1370/2007 of the European Parliament and of the Council of 23 October 2007 on public passenger transport services by rail and by road and repealing Council Regulations (EEC) Nos 1191/69 and 1107/70



One for  
all.



The KlimaTicket Ö really offers something to everyone - namely everything: All public transport in Austria with a single ticket. Simple and inexpensive. A valuable contribution to the climate of our planet.

The KlimaTicket Ö costs € 1.095.

Travellers aged 25 or younger, or 65 and older and disabled travellers pay € 821.

Source: <https://www.klimaticket.at/en/>



# The Ten Point Plan for a Green Industrial Revolution

Building back better, supporting green jobs, and accelerating  
our path to net zero

## Point 5: Green Public Transport, Cycling and Walking



As well as decarbonising private vehicles, we must increase the share of journeys taken by public transport, cycling and walking. We will therefore accelerate the transition to more active and sustainable transport by investing in rail and bus ...

We will expand rail routes around our big regional cities, including Manchester and Birmingham. As set out in the manifesto, our long-term aim is to improve public transport in city regions to make it as good as London's, which would save thousands of tonnes of carbon. In smaller places, we will improve buses, introduce more rural on-demand services, and restore many of the rail links removed in the Beeching era to give people the choice not to drive. We will progress the **Midlands Rail Hub** scheme in Birmingham and improvements in Manchester and Leeds, alongside Northern Powerhouse Rail to improve east-west links across the Pennines.

Source: UK government,

<https://www.gov.uk/government/publications/the-ten-point-plan-for-a-green-industrial-revolution>

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# Revitalization Plan for Johana & Himi Lines in Toyama Prefecture

## 城端線・氷見線再構築実施計画（案）の概要

資料 1

### 1 鉄道事業再構築事業の実施予定期間

令和 6 年 2 月 1 5 日から令和 1 6 年 3 月 3 1 日まで（10年間）

### 2 地方公共団体その他の者による支援の内容

鉄道事業再構築事業の実施に必要な資金の額及びその調達方法

事業に要する経費と負担額（実施計画期間中）

区分	国	県	4市	JR
施設整備費 342億円	128	64	64	86
経営安定支援 40億円	—	11	11	18※
計 382億円	128	75	75	104※

Local governments should invest in the improvement of railway lines because providing railway service is “**public service.**”

### 3 旅客鉄道事業の事業構造の変更の内容

（単位：億円）

変更内容：事業主体をJR西日本からあいの風とやま鉄道へ変更

変更時期：新型鉄道車両導入完了の時期（計画開始から概ね 5 年後）

変更までの対応：JR西日本所有の鉄道施設等のあいの風とやま鉄道へ

The operator will be changed from JR West to Ainokaze-Toyama Railway, whose share is held by local governments by 90%, in around five years.

### 5 利用者の利便の確保に関する事項

「公共サービス」として自治体が投資

(1) 新型鉄道車両の導入 173億円 New vehicles

34両（現車両24両を新型車両に置き

(2) 運行本数の増、新車導入、パターンダイヤ化に伴う改良 44.8億円

Improvement for high frequency services and introduction of regular timetable

- ・城端線、氷見線ともに60本程度/日  
（現行：城端線 42本/日、氷見線 36本/日）
- ・あいの風とやま鉄道 高岡～金沢間（63本）並みの運行
- ・日中のパターンダイヤ化

(3) 交通系ICカード対応改札機の設置 4.6億円

Introduction of IC card system

(4) 城端線・氷見線の直通化 37.8億円

Go-through service between Johana and Himi

(5) 利便性向上のための改良、持続性向上のための既存設備の改良 81億円

Improvement of existing systems

- ・レール、連動装置等の更新 50億円
- ・旅客案内システムの新設 15億円

に比べ、年間3.8億円の改善（▲7.06億円）

Source: Toyama prefecture, <https://www.pref.toyama.jp/documents/37871/10shiryoy1.pdf>